# The Greek and Arabic Fragments

**of**

# Paul of Aegina's

# *Therapy of Children*

Thesis for the MPhil in Classical Languages and Literature

by Peter E Pormann

> Der moderne Übersetzer, ganz wie seine arabischen Kollegen vor über tausend Jahren, empfindet das Verlangen, sein Herz über die vielen Schwierigkeiten ausschütten zu können, die ihm die Übertragung gemacht hat. Von den durch die Benutzung von unzuverlässigen Handschriften und häufig noch viel unzuverlässigeren Druckausgaben verursachten Hindernissen bis zur unlöslichen Problematik der Wortwahl und des Gebrauches einer konsequenten Terminologie gibt es da unendlich viel, worüber er gar manches zu sagen hätte.
>
> F. ROSENTHAL

## Preface

In this MPhil thesis I have collected, re-edited, translated, and commented upon the fragments of the *Therapy and Upbringing of the Children* by Paul of Aegina which mostly survive in the Arabic tradition. Since there has been very little scholarly work on this paediatric treatise by Paul of Aegina, and no critical edition of its major source, al-Baladī, the philological work of securing the text, translating it, and giving it a first although preliminary commentary has been the prime objective. There are three areas I could only touch upon without being able at this stage to undertake any in-depth study: Firstly the Greek sources for Paul's *Therapy of Children* could only be dealt with in a cursory way. I have placed in appendix I the fragments of Rufus' *Therapy of Children*, one of the major sources and a treatise that we will probably be able to restore to a great extent with the help of the Arabic fragments, as the reader will see from the material presented here, since the limited time and scope of this thesis did not allow for a full edition of the text of these fragments. Secondly I inquired into the translation technique applied to Paul's treatise in **F 9** only, a field that will certainly yield many wonderful fruits once tilled thoroughly. Thirdly, I could make but a few remarks about how Paul's *Therapy of Children* was used in the subsequent tradition.

This said I think nonetheless that the present work will bear some new evidence that can cast a fresh light on Greek paediatrics from Rufus of Ephesus to Paul of Aegina. I am indebted to many people, mostly to Prof. ULLMANN (Tübingen) who first suggested Paul of Aegina as a subject to me, Prof. WEISSER (Hamburg) who granted me very liberally access to her collection of microfilms of al-Baladī, and last not least Mr. WILSON and Dr. SAVAGE-SMITH who supervised this thesis.

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# I. Paul of Aegina

## I 1. Life

We have very little information or few indications as to the biography of Paul of Aegina. Apart from his writings only the Arabic bio-bibliographers give us some information — scarce as it may be. The oldest report we have is found in the *Kitāb al-Fihrist* written by Ibn an-Nadīm in 377 AH/987-8 AD, and it reads as follows[1]:

فولس الاجانيطي ويعرف بالقوابلي وله من الكتب كتاب الكناش في نقل حنين سبع مقالات كتاب في علل النساء

Paul of Aegina, also known as the obstetrician. His books are: The book *kunnāš* in the translation of Ḥunain [ibn Isḥāq], seven *maqālas* (books). A book on gynaecology.

From this we only learn that Paul was called *Al-Qawābilī*, the *Obstetrician*, and that he wrote a *kunnāš*, a compendium and some gynaecological work. We are given more ample information in al-Qifṭī's († 1248 AD) history of learned men[2]:

فوليس الاجانيطي ويعرف بالقوابلي طبيب مذكور في زمانه وكان خبيرا بعلل النساء كثير المعاناة لهن والقوابل يأتينه ويسألنه عن الامور [٢٦٤] التي تحدث للنساء عقيب الولادة فينعم الجواب لهن ويجيبهن عن شكواهن بما يفطنه فلذلك تسمّى بالقوابلي وزمنه بعد زمن جالينوس ومقامه بالاسكندرية وكان زمانه بعد زمن يحيى النحوي وكانه في اول الملة الاسلامية ومن تصنيفه كتاب الكُنَّاشِ في الطب نقل حنين سبع مقالات ويعرف بكناش الثُرَيَّا كتاب في علل النساء

Paul of Aegina, also known as the obstetrician, was a famous physician in his time. He was an expert in women's diseases, and had many remedies for them. The midwives came to him to ask him about the things that happen to women following the delivery, and he replied to them happily, [always] answering their concerns with what he knew. Therefore he was called *the obstetrician*. He lived after Galen, and dwelled in Alexandria. He lived after Yaḥyā, the Grammarian[3], i.e at the beginning of Islam. He composed: The book *kunnāš* on medicine in the translation of Ḥunain [ibn Isḥāq], seven maqālas, also known as the *Compendium* (*kunnāš*) *of the Pleiades*. A book on gynaecology.

This account is repeated by Barhebraeus († 1286 AD) with only very minor alterations.[4] Here we are told that Paul lived in Alexandria at the beginning of Islam, and this concurs well with the authors he used in his *πραγματεία* (*vid. infra*), since the latest is Alexander of Tralles

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[1] *Kitāb al-Fihrist* ,ed. G.Flügel, 2 Bde, Leipzig 1871 f., p. 293,3-5.

[2] Al-Qifṭī, *Ta'rīḫ al-Ḥukamā'*, ed. J. Lippert, Leipzig 1903, p. 263, -3 - 264,5.

[3] There are some problems involved with the dating and identification of Yaḥyā, the Grammarian, e.g. the *Fihrist* (ed. Flügel p. 254,23) reports that he lived up to the conquest of Egypt by ʿAmr b. ʿĀṣ. For the whole problem of John Philoponos and John Alexandrinus cf. Max Meyerhof, *Joannes Grammatikos (Philoponos) von Alexandrien* In: *Mitteil. Dt. Inst. Ägypt. Alterumskunde in Kairo*, 2 (1932) p. 1-21.

[4] Barhebraeus *K. Muḫtaṣar ta'rīḫ ad-duwal li-a. l-Faraǧ b. al-ʿIbrī*, ed. Anṭūn Ṣāliḥānī, Bairūt [1]1890, p. 176,-7 - paen. = Bairūt [2]1958, p.103,5-9:

ومن الاطباء المشهورين في هذا الزمان بولس الاجانيطي طبيب مذكور في زمانه وكان خيرا خبيرا بعلل النساء

(mid 6th cent.). We finally have to mention the small note in Ibn abī Uṣaibi'a († 1270 AD) who tells us that Paul has also composed a monograph *On the Therapy and Treatment of the Child*:

وفولس الاجانيطي وله من الكتب كناش الثريا مقالة في تدبيرالصبي وعلاجه

Paul of Aegina. His books are: The *Compendium of the Pleiades*; a monograph *On the Therapy ad Treatment of the Child.*

In the Greek sources, i.e. the manuscripts of the *πραγματεία*, he is called *Παῦλος Αἰγινήτης* which becomes among the Arabs *Baulos* or *Faulos al-Aǧānīṭī*, so that we have to assume that he was born in Aegina. Two manuscripts recorded in Heiberg's edition[5] (C,J) have a distich in iambic trimetres reading: *Παύλου πόνον με γνῶθι τοῦ γῆς τὸ πλέον/ διαδρανόντος φύντος ἐκ τῆς Αἰγίνης*. This points to the fact that Paul travelled a great deal, but the historic value of this distich is extremly limited.[6] He is also called *περιοδευτής*, but this does not so much refer to his practicing while travelling, but rather to his activity as *ἰατροσοφιστής*.[7] Heiberg[8] thought him to be a Christian, since when discussing circumcision, he says that this was done *διὰ σέβας ἐθνικόν* (PAeg VI 57 [II p. 97,7]), while his source Oribasius has *δι' ἀθεότητα*[9].

So Paul lived in seventh century Alexandria, and probably practiced as an *ἰατροσοφιστής*. Medicine besides philosophy, theology, and sciences were eagerly studied there in late Antiquity, and the teaching that was undertaken before the Arabic conquest in the *Μουσεῖα* and *'Ακαδημίαι* seems to have gone on for some time even after 'Amr b. 'Āṣ took Egypt.[10] The medical academic curriculum comprised mostly Hippocrates and Galen in late antique selections. The teaching focused on the repetition of principal tenets, and the philosophy *en vogue* at this time had a great bearing on this teaching, e.g. the four Aristotelian causes were used to explain diseases. All the subjects were generally divided according to the *διαίρεσις* method into

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[5] I.L. Heiberg, *CMG* IX 1.2, Lipsiae et Berolini, 1921/1924.

[6] There are two other little poems of similar artistic quality in manuscripts D (*Παῦλος ἰητρὸς ἀνὴρ πολλῶν ἀντάξιος ἄλλων / ἀνδράσιν ἠδὲ γυναιξὶ νούσων εὗρετο παῦλαν / ‹Αἴγινα› δ' αὐτὸν ἔνεικε βαβαὶ πόσον ἄνδρα τοσήδε*) and O (*οὔνομά μοι Παῦλος πατρὶς Αἴγινα πολλὰ μογήσας / πᾶσαν ἀκεστορίην βίβλον ἔτευξα μίην*).

[7] Cf. Diller *RE* XVIII,4,1949, (nr. 23) col. 2386-2397, 2387.

[8] J.L. Heiberg, "De codicibus Pauli Aeginetae observationes" in: *REG* XXVI (1919) p. 268-277, p. 270.

[9] L 7; but the new edition by J. Raeder (*CMG* VI 2,2 p. 59,12) reads *διὰ θεόθητα. Σέβας ἐθνικόν* is nonetheless a very typical expression, although the sense in Oribasius is quite different with the new reading.

[10] Cf. M. Meyerhof, "Von Alexandrien nach Bagdad. Ein Beitrag ..." in: *Sitzungsberichte der preuss. Ak. Wiss. Phil.-Hist. Kl.* 23 (1930), p. 387-429. I will not discuss here the problem of the most likely apocryphal account of the uninterrupted chain of teachers "From Alexandria to Bagdad". See G. Strohmaier, "'Von Alexandrien nach Bagdad' — eine fiktive Schultradition" in: J. Wiesner (ed.), *Aristoteles. Werk und Wirkung* (Festschrift P. Moraux) Berlin/New York 1987, Bd. II p. 399-9, and J. Lucas, "From Alexandria to Baghdad

smaller sub-chapters to make the learning easier. The physicians (*ἰατροσοφισταί*) did not enjoy lasting reputation except for a few cases as e.g. that of Gesius. These *ἰατροσοφισταί* enjoyed the bad reputation most sophists had, i.e. that they were very good at talking, but useless in practice, but they were nonetheless considered by some to be the most competent practitioners, since it was they who were called upon in very difficult cases.[11] Although we have no direct evidence of Paul's medical activity in Alexandria, it is likely that he himself was involved in teaching and practicing according to these lines.

## I 2. Works in General

Although we are here mostly concerned with Paul's *Therapy and Upbringing of Children* the fragments of which are edited here for the first time, we cannot leave undiscussed the other writings both rightly and wrongly attributed to him. We shall start with the latter. F. Sezgin[12] mentions among the works of Paul of Aegina a *Therapy of Pregnant Women* (*Tadbīr al-ḥawāmil*) that is allegedly quoted in Rāzī[13]. This quote runs:

بولس في تدبير الحوامل : مما يثير شهوةَ الحاملِ المشيُ والخمر العتيقة والريحانية والقصد في المأكل والمشرب والتعريض للاطعمة المختلفة اللذيذة ويتناول في كل قليل اشياء فيها حرافة كالخردل *

Paul of Aegina on the regimen of pregnant women: Things that stimulate the appetite of the pregnant woman are walking, old and fragrant wine, frugality in both food and drink, and being offered different tasty dishes. She should have something acrid to eat ever so often like mustard.

This quote clearly comes from the very first chapter of the *πραγματεία* where we read:

*... οὐ χεῖρον πρὸς αὐτὰς* [sc. *τὰς κυούσας*] *ὑποθήκας γράψαι. περίπατοι, σιτία μὴ ἄγαν γλυκέα καὶ οἶνοι κιρροὶ καὶ εὔοσμοι ... τὰς δὲ ἀποσίτους προτρέποι ἂν ἐσθίειν τά τε ποικίλα σιτία καὶ τὰ πρὸς ἡδονὴν ... καὶ τὸ δριμέων δέ ποτε γεύεσθαι, καὶ μάλιστα νάπυος, ἐπιτήδειον τῇ ἀποσίτῳ κτλ.*

Ar-Rāzī is not quoting Paul here very accurately, but rather presenting summerized accounts of some remedies suggested by our author, but this is by no way uncommon for ar-Rāzī, as has been shown by U. Weisser.[14] So the beginning of this quote gives the subject rather than the title of a work composed by Paul.

Sezgin[15] also mentions a book *On the Maceration of Obese People* (*Kitāb fī Tahzīl as-simān*) amongs the Pauline writings, yet this monograph is not by Paul but rather by Rufus. Although

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[11]Cf. J. Duffy, "Byzantine Medicine in the Sixth and Seventh Centuries: Aspects of Teaching and Practice" in: J. Scarborough, *Symposium on Byzantine Medicine,* Dumbarton Oaks Papers 38 (1983), Washington DC 1984, p. 21-27.

[12]*Geschichte des Arabischen Schifttums*, Band III: *Medizin – Pharmazie, Zoologie – Tierheilkunde*, Leiden 1970 (abbr.: *GAS* III), p. 170 (no. 2).

[13]*K. al-Ḥāwī fī ṭ-ṭibb*, 23 voll., Ḥaidarābād 1955 ff., V 54, 17-ult.

[14]U. Weisser, "Zitate aus De methodo medendi imHāwī" in: G. Endress, R. Kruk (Hg.) *The ancient tradition in Christian and*

the quote in the Ḥaidarābād edition[16] begins as follows:

من كتاب بولس في تهزيل السمان ؛ قال : السمان لا يصبرون على الجوع والعطش الخ

From the book of Paul *On the Maceration of Obese People*: He said: Obese people can withstand neither hunger nor thirst etc.

the Latin translation has the correct author lemma[17]:

*De libro ruffi ad macrefaciendum pinguem: dixit: pingues quoque non sustinent famem neque sitim etc*.

The confusion between Arabic بولس (Paul) and روفس (Rufus) in Arabic manuscripts is quite common, although this mistake might also be attributed to the carelessness of the editors who record the readings of the manuscript tradition quite often inaccurately.

H.J. Thies wanted to see in the quotations of Rāzī in *Ḥāwī* XIX 145,9-10; 147,3-149,2; 150,6-152,2 the remnants of a uroscopic treatise by Paul[18], and already H. Diels in his catalog of medical manuscripts[19] mentionned a *Περὶ οὔρων* by Paul. Firstly it has to be said that this entry in Diels is based on a mistake, and that there is no Pauline uroscopic treatise in Greek.[20] As to the Arabic fragments, we will have to discuss them one by one in order to see what is happening here, especially since the author lemmata are highly doubtful in the passages Rāzī *Ḥāwī* XIX 145 ff. In XIX 145,9 f. the author lemma is that of Paul both in the Arabic:

بولس ؛ قال : البول في حمى الربع كثير التغير والتبدل ألا إنّه[21] فيها اجمع غير نضيج.

Paul: He said: The urine during the quartan fever is subject to strong changes and alterations. Truely everything in this [fever] is undigested.

and in the Latin translation [II f. $407^{v}_{a\ 26\ f.}$]:

*Inquit Paulus: urine quartanariorum sunt multarum mutationum et indigeste*.

but this does not match too well what Paul himself says in his *πραγματεία* II 21 (I p. 100,21 f.: *ἐπὶ τούτοις εἰ λεπτὰ καὶ λευκὰ καὶ ὑδατώδη τὰ οὖρα τυγχάνοι, τεταρταῖος ἂν εἴη ὁ πυρετός*).

We have to leave this open for the time being, but the next passage Rāzī *Ḥāwī* XIX 147,3-5:

بولس اما ان يبال فيَرْسُبُ عن قليل ويصفو ، واما ان يقف على حاله ، اما ان يكون بعد بقائه[22] يتكدر ؛ واجوده الاول لانه يدل على النضج والثاني متوسط.

Paul: If one urinates, either a sediment is formed after a short period of time, and it [sc. the urine] becomes clear,or it remains intact, or it becomes turbid after it has been let sit. The first [case] is the best, since it indicates digestion, and the second is all right, [the third is very bad].

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[16] Ar-Rāzī *al-Ḥāwī* t. VI 242,8 f.

[17] *Continens Rasis*,Venetiis, 1529 I $136^{v}_{a\ 41}$

[18] H.J. Thies, *Der Diabetestraktat 'Abd al-Laṭīf al-Baġdādī's*, Bonn 1971, p. 70 Anm. 5, followed by M. Ullmann, *Die Natur- und Geheimwissenschaften im Islam HO* 1. Abt. Erg. VI 2, Leiden etc. 1972 p. 457 [Addenda to his *Die Medizin im Islam*, *HO* 1. Abt. Erg. VI 1, Leiden etc. 1970, p. 87]).

[19] *Die Handschriften der antiken Ärzte*, Berlin 1906, II p. 79.

[20] A similar conjecture made by Diller *ibid*. col. 2388 has been proven to be right by Konstantin Dimitriadis "Ein siebenbändiger Paulus von Aigina *Περὶ οὔρων* und wie er zu Stande kam" In: G. Keil (ed.) *Fachsprosa-Studien,* Berlin 1982, p. 313-317.

[21] ألا انّه means *certainly, truely* and is similar in its usage to the Hebrew הֲלֹא in the sense of הִנֵּה cf. Wright II 309 D ff and

where the Latin translation reads [II f. 407$^{v}_{a\ 41\text{-}44}$]:

> *Inquit Paulus: urina quando mingitur aut parum post clarificatur et facit hypostasim aut remanet in sua propia dispositione: aut post eius clarificationem turbatur et prima bona: quia digestionem significat et tertia mediocris.*).

is clearly an excerpt from the *πραγματεία* [II 13 (I p. 94,21 ff.)]:

> *οὖσης δὲ τριττῆς τῆς τῶν θολερῶν οὔρων διαφορᾶς (ἤ γὰρ οὐρηθέντα τοιαῦτα καθίσταται μετ' ὀλίγον ἢ μένει παραπλησίως ἄχρι παντὸς ἢ καθαρὰ μὲν ἐκκρίνεται, μετὰ ταῦτα δὲ ἀναθολοῦται) μοχθηρὸν μὲν τὸ τρίτον εἰρημένον, ἐπιεικὲς δὲ τὸ πρῶτον, ἐν μέσῳ δ' ἀμφοῖν ἐστι τὸ δεύτερον.*

In Rāzī *Ḥāwī* XIX 147,6 the situation is quite different. Beside the reading *Baulus* or *Būlus* at the beginning of this quotation we find (in mutilated form) *min kitābi Dīmūqrāṭīsa (from the book of Democritus*) in part of the manuscript tradition, and this is also what the Latin translation reads in principle (II f. 407$^{v}_{a\ 45}$: *Ait Democritus*). It is likely that this Democritus is none other than Bolos of Mendes who was known as *Βῶλος Δημόκριτος*, and is referred to like that among the Arabs.[23] The *Suda*[24] mentions among his works a *Τέχνη ἰατρική* from which the present quote could have been taken. The double name *Βῶλος Δημόκριτος* would explain why a part of the manuscript tradition reads *Būlus* and the other *Dīmūqrāṭīs*.

The next citation is found in Rāzī *Ḥāwī* XIX 150,6 f.:

قال بولس : ينظر في امر البول الى قلته وكثرته ولونه وطعمه الخ

Paul said: As regard the urine, look at its small and large quantity, its colour, its taste etc.

The Latin translation has [II f. 407$^{v}_{b\ 3\ f.}$]:

> *Inquit Ruffus* : co*nsiderandum est in urina secundum multum et parum secundum colorem et saporem etc.*

Instead of بولس (Paul) we find روفس (Rufus) in some of the Arabic manuscripts (د, ف in the Ḥaidarābād edition), and also the Latin translation takes Rufus to be the source of the excerpt. That this latter is the correct reading will be clear if we consider how the next quote in ar-Rāzī is introduced (*Ḥāwī* XIX 152,3), where part of the manuscript tradition reads:

استخراج قد تبين روفس

An excerpt — Rufus explained.

and part of it (mss. ف,د) reads:

استخراج من كتاب آخر

An excerpt from a different book.

That seems to mean that ar-Rāzī continues to quote Rufus, but a different book, not the uroscoptic treatise (مقالة في البول) that he has written according to Ibn abī Uṣaibi'a[25]. So apart from the first quote nothing remains of the Arabic of Paul's uroscopic treatise, and it is more than likely that this has never existed.

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[23] Vgl. Ullmann *Nat.wiss.* p. 402.

[24] I 489,27 (ed. Adler). The Suda distinguishes between two Democriti that seem to be identical, cf. W. Krou, "Bolos und

As for the pseudo-pauline treatise on toxicology, that is mentioned by SEZGIN[26] yet only found in the Hebrew tradition, suffice it to repeat what M. STEINSCHNEIDER[27] has said about it:

> § 425. **Paulus** (von Aigina); unter dem Namen "פולוס, der Arzt" findet sich ein Fragment einer Abhandlung über die Gifte, verfasst für einen König, der sich derselben gegen seine Feinde bedienen sollte, von einem Anonymus ins Hebräische übersetzt:
>
> Mss. Mn. 214[7]. Rom. Casanat. J IV f. 211. Vat. Urb. 46[2].
>
> Diese Schrift ist am Anfang in IV Teile geteilt, nach dem Ursprung der Gifte: 1. animalische, 2. mineralische etc. Einige arabische Wörter, z.B. אבן ערם, beweisen den arabischen Ursprung. Von Paulus von Aegina, dem unser Werk untergeschoben scheint, ist keine derartige Schrift bekannt.

D. CAMPBELL[28] thought this to be an excerpt from book 5 of the *πραγματεία*, but this is not very likely given the information by STEINSCHNEIDER.

We have already seen that three out of the four Arabic bio-bibliographers mention among the work of Paul a book on gynaecology, but until today no fragments of this treatise have been found. It is doubtful that such a treatise has ever existed. This report about a gynaecological work might have been induced by the fact that Paul was famous for his knowledge in this branch of medicine — one only has to think about his nickname *The Obstetrician* — or it might have been an excerpt from the gynaecological chapters of the *πραγματεία* (III 70 ff.).

## I 3. *Πραγματεία*

Before we discuss the main subject of this paper, the *Therapy of Children*, it is fitting to make some general points about Paul's *chef d'œuvre*, his *πραγματεία*. Many manuscripts of this medical handbook have come down to us, which in itself is a sign for its great popularity and wide circulation.[29] This popularity is due to the fact that it comprises in a convenient size the essentials of medical knowledge. Paul himself accounts in his preface for the method he used in compiling this *ὑπόμνημα*. He did not want so much to set out new medical findings of his own, but rather give a succinct yet complete account of the art, using his predecessors and especially Oribasius. His model were the legal handbooks used by jurists. Yet sometimes he adds something of his own. Book I conprises hygiene, prophylactics, and diet, book II the fevers, book III the description of the local ailments from head to toe, book IV the external diseases and worms, book V the treatment of bites by poisonous animals and the like, book VI surgery, and finally book VII the *materia medica* along with medical weights and measures.

This handbook has been translated into Syriac as we know from a number of fragments in Bar Bahlūl[30]. A Syriac physician named Ibn Sarābiyūn has used Paul's *πραγματεία* quite

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[26] *ibid.* III 170.

[27] MORITZ STEINSCHNEIDER. *Die hebräischen Übersetzungen des Mittelalters und die Juden als Dolmetscher.* Graz 1956. p. 668.

heavily often without making any explicit reference to him.[31] This Syriac translation has probably been the basis for the Arabic translation allegedly made by Ḥunain ibn Isḥāq. Because of its division into seven maqālāt it was called كُنَّاش الثُّرَيَّا *Compendium of the Pleiades*.[32] The Syriac translation is mostly lost but for the small number of quotations in Bar Bahlūl, but the Arabic version is still partly available in the manuscript *Parisinus graecus* 2293, and in many quotations in later Arabic medical authors such as ar-Rāzī (most prominent is the *Kitāb al-Ḥāwī*, lat. *Liber Continens*). From Bar Bahlūl we know that an Arabic commentary must have existed, since he quotes a مفسّر فولوس ("commentator of Paul"), and **وهلاه** ("translator of Paul") quite frequently.[33] Having discussed the other works of Paul of Aegina, we shall know come to the major subject of this thesis, his paediatric treatise.

## II. Paul of Aegina's *Therapy of Children*

### II 1. Title and Content

M. Ullmann[34] was the first to point out the importance of al-Baladī (**' III.** p. 12) as a source for the paediatric treatise of Paul of Aegina. In fact al-Baladī's book *On the Therapy of Pregnant Women and Children* is — as far as we know — the only place where this treatise by Paul is quoted explicitly. Al-Baladī quotes this treatise under slightly different titles. The most common is في تَدْبِيرِالأَطْفَالِ وَتَرْبِيَّتِهِمْ *On the Therapy and Upbringing of Infants* (**F 3** ٣, **F 6** ٤, **F 18** ٢, **F 22** ٢), yet variations occur: في تَدْبِيرِالأَطْفَالِ *On the Therapy of Infants* (**F 11** ٢), في

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[30] Collected by I. Löw, Review: "*R. Payne Smith, Thesaurus syriacus*. Oxonii Fasc. IX." in: *ZDMG* 47 (1893) p. 514-537. See also R. Duval's *Proœmium* his edition of Bar Bahlūl t. III p. xxii.

[31] This has already been seen by I. Bloch, *Handbuch der Geschichte der Medizin*, founded by v. T. Puschmann, edited by M. Neunurger and J. Pagel, tt. I-III, Jena 1902-1905, t. I p. 550. P. Diepgen (*Frau und Frauenheilkunde in der Kultur des Mittelalters,* Stuttgart 1963, p. 25) remarked that the chapters at the end of book V of the smaller *kunnāš* by Ibn Sarābiyūn draw heavily on the gynaecological chapters in the *πραγματεία* (III 60 ff.). The chapters V 21 and V 22 of the smaller *kunnāš* (edited by M.Ullmann, "*Yūḥannā ibn Sarābiyūn* Untersuchungen zur Überlieferungsgeschichte seiner Werke" in: *Medizinhistorisches Journal* VI 4 (1971), p. 278-296) are taken from PAeg V 2.1 f. and V 13.1-3.

[32] The Pleiades only have six visible stars, but in the popular imagination, they were soon made seven because of the special qualities attributed to this number; cf. P. Kunitzsch, M. Ullmann, *Die Plejaden in den Vergleichen der arabischen Dichtung*, SBAW, München 1992.4, p. 13 ff. As an example of the Pleiades consisting of seven stars I would like to quote the following beautiful distich (*ibid.* p. 18):

خَلِيلَيَّ إِنِّي لِلثُّرَيَّا لحَاصِدُ وَإِنِّي عَلى رَيْبِ الزَّمانِ لَواجِدُ
أَيُجْمَعُ مِنْها شَمْلُها وَهْيَ سَبْعَةٌ وَأَفْقِدُ مَن أَحْبَبْتُهُ وَهْوَ واحِدُ

*My friends, I envy the Pleiades, and am angry with Fate. They can be all together although they are seven, yet I have to lack my beloved, who is but one.*

تَدْبِيرِ الأَطْفَالِ وَعِلاجِهِمْ *On the Therapy and Treatment of Infants* (**F 15** ٣)[35], في تَدْبِيرِ الصِّبْيانِ وَتَرْبِيَّتِهِمْ *On the Therapy and Upbringing of Children* (**F 21** ٢), and في تَدْبِيرِ الصِّبْيانِ *On the Therapy of Children* (**F 2** ٢).[36]

U. Weisser[37] was able to prove that this treatise must also have existed in Greek, and is not just a Arabic pseudepigraphal writing. The late Dr. Weber had pointed out to her the existance of a short quote in the Florentine manuscript *Laurentiana* plut. 74,2 f^o^ 281^v^ that is a complete match with the quote from Paul in Baladī *Ḥabālā* I 18 (**F 1**). In this manuscript the excerpt is said to be from the treatise *On the Therapy of Pregnant Women and Embryos* (*Περὶ κυουσῶν καὶ βρεφῶν θεραπείας*) by Damnastes, an otherwise unknown author.[38] The very uncommon name *Δαμναστής* may even be a misspelling for the much more common *Δαμαστής*.

We can partly reconstruct the structure and content of Paul's *Therapy*, as I shall hence forth refer to his paediatric treatise, from the fragments we find in al-Baladī. Of paramount importance in doing so is **F 2** where al-Baladī nearly gives a list of contents of the *Therapy* (esp. l. ١٠ ff.). When we take this fragment as a guideline, we come to the following lists of content:

| Subject | Frag. | Baladī *Ḥabālā* | Equivalent *πραγμ.*[39] |
|---|---|---|---|
| 7,8,9,10-months children | **F 1** | I 18 | — |
| Milk of the wet-nurse | **F 2** | III 1 | I 3 |
| Dentition | **F 3** | III 32 | I 8 |
| Inflammation of the eye | **F 4** | III 19 | III 22.3 |
| Leucoma | — | — | III 22.24 |
| Moisture in the ear | **F 5** | III 22 | I 12 |
| Proliferating flesh in the ear | **F 6** | III 25 | III 23.7 |
| [Ulcers in the ear | **F 7** | III 24 | III 23.? ] |
| Inflammation in the Ear | **F 8** | III 23 | III 23.1 |
| Siriasis | **F 9** | III 5 | I 13 |
| Fear | **F 10** | III 8 | — |
| Fever | — | — | II ? |
| Weeping discharge (?) | — | — | III 55 ? |

[34]Ullmann *Medizin* p. 345 (*Nachträge*).

[35]This is also how Ibn Abī Uṣaibi'a lists it (*vid. supra* p. 2).

[36]I have translated *ṭifl* with *infant* and *ṣabīy* with *child* in order to indicate through my translation the original Arabic title, but they are often used interchangeably. They are not always distinguished by the mediaeval Latin translators and rendered with *infans*. Freytag gives for the former *Infans parvus* and for the latter *Puer, adolescentulus*.

[37]U. Weisser, "Yuḥannā ibn Māsawaihs Abhandlung über die Leibesfrucht und ihre Entstehung im Mutterleib" In: *ZGAFW* 8 (1993) p. 114-135, p. 118 f.

| | | | |
|---|---|---|---|
| Sneeze | **F 11** | III 40 | II 48 |
| Cough | —[40] | (III 37) | = I 7 |
| Diarrhoea | **F 12** | III 47 | III 39 |
| Constipation | **F 13** | III 48 | III 43 |
| Intestinal worms | —[41] | (III 45) | IV 57 f. |
| Dermatological disorders | **F 14** | III 52 | III 3.? |
| Cradle cap | **F 15** | III 2 | III 3.5 ? |
| Honeylike ulcers | **F 16** | III 3 | IV 34 ? |
| Abrasion at the thighs | **F 17** | III 55 | ≈ I 11 |
| Excessive hair growth | **F 18** | III 56 | III 1.? |
| Anal prolapse | **F 19** | III 49 | III 59,12 |
| Protrusion of the navel | **F 20** | III 50 | III 51 |
| Apoplexy | **F 21** | III 11 | III 17 |
| Swallowed bone | **F 22** | III 36 | — |

This list has to be taken *cum grano salis*, since we cannot be sure about the arrangement of the different otological chapters. This list shows that one of the major sources for Paul's *Therapy* is his *πραγματεία* where he deals with a number of paediatric problems. Yet the *Therapy* is not merely an excerpt from this larger work, but often goes its own ways. Already al-Baladī saw this. In the chapter *On Dentition* (**F 3 ٣٣-٥**) he clearly states that the treatment in the *πραγματεία* is close to that in the *Therapy*, but they differ slightly, and for that reason they are worth being quoted together. Another instance where *πραγματεία* and *Therapy* are cited in the same chapter in al-Baladī is the treatment of siriasis (**F 9**). In the commentary to this fragment I shall try to show that the phraseology is quite different in the two quotes without varying in the content too much. This might point to a different translation technique that was used in rendering the two works of Paul of Aegina. It is nonetheless too early to make definitive judgements in this area since a thorough study of the Arabic translation of the

[39]Here are given the places where Paul of Aegina treats the same subject in his handbook.

[40]Al-Baladī has indeed a chapter on cough (III 37), where he also quotes Paul, yet not his *Therapy*, but his *πραγματεία* (Muḥ p. 289,8-11): ذكر ما قاله فولس في ذلك [في السعال العارض للصبيان] وقال فولس في كناشه: متى عرض للطفل زكام او سعال فينبغي ان يعالج بهذا العلاج صفة ان يغسل اولا بماء حار كثير ثم يغمز عليه غمزا رقيقا فانه اذا فعل ذلك تقيأ بلغما كثيرا *The account of what Paul said about this [sc. about the cough that befalls the children]. Paul said in his* kunnāš *(πραγματεία):When a catarrh or a cough befall the child, it is necessary to treat him as follows: wash him first with a lot of warm water, then touch him softly. If you do this, he will vomit a lot of plegm* corresponging to PAeg. I 7 (I p. 11 19-23: *Περὶ βηχὸς παιδίου καὶ κορύζης.* Εἰ δέ ποτε βὴξ ἢ κόρυζα συμβαίη τῷ παιδίῳ, τοὺς μελιτισμοὺς καλουμένους παραληπτέον. χρὴ τοίνυν λούσαντα αὐτὸ πολλῷ θερμῷ καὶ κατὰ κεφαλῆς χρῖσαι μέλιτι πολλῷ, κἄπειτα τῷ δακτύλῳ τὴν γλῶτταν πράως πιέσαι· ἐμεῖ γὰρ φλέγμα πολύ.).

[41]Al-Baladī deals with intestinal worms in III 45 and also quotes Paul of Aegina there (p. 304,-6 - 307,14), yet the provisions given seem to come from the *πραγματεία* (I p. 381,25 ff. Ḥunayn) rather than the *Therapy*. Cf. also the quotes in

*πραγματεία* is still missing, a study that would have to be at the base of any philologically sound comparison of the two translations.[42]

Finally we have to discuss the question how much of the original size the fragments of the *Therapy* here collected represent. I would argue that we can confidently assert that we have the larger part of this treatise. Al-Baladī himself says that he thinks it unfitting to leave out any subject treated in Paul (ʾ **F 18** ٢-٤), so it is likely that al-Baladī included if not most of the *Therapy* than at least large portions from each chapter in it. Before we discuss al-Baladī from whose work all our fragments of Paul's *Therapy* come, I would like to give an overview of the major Greek sources for this paediatric treatise.

## II 2. Greek Paediatric Sources

It cannot be the aim of this section to write a history of Greek paediatrics, yet it is still necessay in order to understand the *Therapy of Children* by Paul of Aegina and to place it into its historical context, to discuss some of his more relevant predecessors. Although the first paediatric monograph in the Greek medical tradition seems to have been written by Rufus of Ephesus — and this I shall discuss in greater detail below — from Hippocrates[43] onwards, the child and its health were the concerns of physicians. In fact, the Hippocratic *Aphorisms* III 24 and III 25 about the different diseases that befall children according to their age seem to have been programmatic for later writers. Although there are many treatises in the *Corpus Hippocraticum* concerned with the development of the embryo in the womb, e.g. *De natura pueri*, *De semine*, *De septemmestri partu*, *De octimestri partu*, *De superfetatione* etc., a monographic treatment of *púériculture* is missing. Galen, of course commented on many of the Hippocratic works, and in doing so and at other occasions touched upon matters of childcare and paediatrics, but he did not write a treatise *Περὶ κομιδῆς παιδίου* as Rufus did.

Soranus had probably the greatest influence on later medical encyclopaedists as far as this subject is concerned. In the greater part of book II of his *Gynaecia*, starting with chapter 9 under the heading *Περὶ τῆς τοῦ βρέφους ἐπιμελείας*[44], he gives provisions as to how to decide, if the newborn child is worth being raised, how to cut the umbilical cord, how to

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[42]The *πραγματεία* is said to have been translated by Ḥunain ibn Isḥāq (ʾ p. 1), yet this information should not be given to much credit in its own right.

[43]I shall use the term Hippocrates without always implying that the actual treatise from the *Corpus Hippocraticum* was actually written by the historical Hippocrates. The scope and subject of this paper does not allow for an in-depth discussion of the

cradle, how to nourish the child, what wet-nurse to choose, when to wean it. He discusses dentition, and the diseases already said by Hippocrates (*Aph.* III 25) to occur at that age. Oribasius takes up a number of matters discussed by Soranus in the fifth book of his *Synopsis ad Eustathium*, and this selection will greatly influence Paul of Aegina himself in his treatment of childcare at the beginning of his *πραγματεία*. Yet there is one very important author whom Paul often used in his *Therapy*, and who lived not long before him: Aetius of Amida who wrote a medical encyclopaedia of his own, the complete Greek text of which still awaits publication[45]. In the beginning of the fourth book of his encyclopaedia, he treats different subjects related to children, and although following his predecessors to a large extant, none the less often goes his own ways, and is, as already said, followed in this by Paul in his *Therapy* as we shall see in detail in the commentaries to the different fragments.

We now have to turn our attention to the paediatric monograph *Περὶ κομιδῆς παιδίου* if this is the correct Greek title of the treatise by Rufus of Ephesus that is known in the Arabic tradition[46] as في تَدْبِيرِ الأَطْفَالِ *On the Therapy of Infants* or في تَرْبِيَّةِ الأَطْفَالِ *On the Upbringing of Infants*.[47] There is one excerpt from Rufus under this Greek title in Oribasius[48], dealing with bathing, nutrition, and other first cares that should be bestowed onto the newborn child, but I would argue that it is not certain that it is from this Arabic treatise. Be this as it may, from the way the Arabic tradition quotes this *Therapy of Infants* we can be quite sure that it was a real monograph (*kitāb*) and not an excerpt from a larger work. Of course, the limited number of fragments, which I thought fitting to include in this thesis as an appendix (**᾽ V.** ) do not present the entire picture about this treatise, but is is fairly safe to make a number of assumptions.

Generally speaking, Rufus of Ephesus was the great monographer among the ancient physicians, specializing in short treatises on well delimited subjects. So is seems reasonable to assume that his paediatric treatise was of rather short length as well. The fact that among the few fragments we have, some are drawn from different sources (**᾽ F (R) 5** on *Moisture in the Ears*, **F (R) 7** on *Thrush*, and also **F (R) 10** on *Boils*), might suggest that the treatise was quite

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[45] Cf. V. Nutton, s.v. Aetius von Amida in: *Der Neue Pauli* I.

[46] Cf. GAS III 65, nr. 4, Ullmann *Medizin* p. 74 nr. 18 and p. 345 (*Nachträge*). Cf. Ilberg *Rufus* p. 29 f., who discusses a number of fragments in Oribasius which we can now attribute with certainty to Rufus because of the quotes in al-Baladī. I could only very superficially touch upon this subject which awaits further exploration.

[47] The smaller part of these fragments, all from Rāzī *Ḥāwī* have already been included in Daremberg/Ruelle's edition *Les Fragments de Rufus d'Éphèse*, Paris 1879 on the basis of the Latin translation (*Continens Rhasis*), and F. Rosenthal, *Das Fortleben der Antike im Islam*, Zürich/Stuttgart 1965, p. 273 f., has translated some of them from the Arabic. Ullmann *Medizin* p. 345 (*Nachträge*)

short, and that we have a substancial amount of the material, since if the treatise were very large the likelihood of having citations from the same context is much more inferior. The subjects treated are more or less those included in the paediatric chapters of the later encyclopaedias as discussed above: The infant's first nutrition (**F (R) 1**), the temperament of the child (**F (R) 2**), children's diseases in general (**F (R) 3**), cramps (**F (R) 4**), moisture in the ears (**F (R) 5**), Inflammations in the ears (**F (R) 6**), thrush (**F (R) 7**), dentition (**F (R) 8**), constipation (**F (R) 9**), boils (**F (R) 10**), dermatological disorders (**F (R) 11**), breast-feeding (**F (R) 12**), curdling milk (**F (R) 13**) and spitting blood (**F (R) 14**). In this selection we can again see the strong influence Hipp. *Aph.* III 24 f. had on the subsequent paediatric writings.

## III. Al-Baladī

### III 1. Life

Abū l-ʿAbbās Aḥmad ibn Muḥammad ibn Yaḥyā al-Baladī[49], our only Arabic source for the fragments of Paul's *Therapy*, wrote himself a book *On the Therapy of Pregnant Women and Children*. The nearly only source for al-Baladī's biography in a short note in Ibn Abī Uṣaibiʿa[50]:

> *(احمد بن محمد البلدي)* هو الشيخ ابو العباس احمد بن محمد بن يحيى من مدينة بلد وكان خبيرا بصناعة الطب حسن العلاج والمداواة وكان من أجَلّ تلامذة احمد بن ابي الاشعث لازمه مدة سنين واشتغل عليه وتميز ولأحمد بن محمد البلدي من الكتب كتاب تدبير الحبالى والاطفال والصبيان وحفظ صحتهم ومداواة الامراض العارضة لهم صنّفه للوزير ابي الفرج يعقوب بن يوسف المعروف بابن كِلّس وزير العزيز بالله في الديار المصرية
>
> Muḥammad ibn Muḥammad al-Baladī: This is the sheik Abū l-ʿAbbās Aḥmad ibn Muḥammad ibn Yaḥyā from the town [named] Balad. He was experienced in the art of medicine, and a good practitioner. He was the pupil of Aḥmad b. Abī l-Aš'aṯ [† 970], whom he frequented many years. He studied with him and distinguished himself. Aḥmad ibn Muḥammad al-Baladī wrote a book *On the Therapy of Pregnant Women, Infants and Children, the conservation of their health, and the treatment of the diseases that befall them*. He composed it for the vizier Abū l-Faraǧ Yaʿqūb ibn Yūsuf [† 990], who was known as ibn Killis, the vizier of al-ʿAzīz bi-llāh in the land of Egypt.

As it so often happens, we are not able to go much beyond the information given by the Arabic bio-bibliographers. R. Dagorn[51] tried to reconstruct his life as far as possible, but most things are pure speculation. Only two dates are known from his biography: 1) In 965 he wrote a book with medical content at the behest of his teacher. 2) In 990 his patron Ibn Killis died. His teacher Ibn Abī l-Aš'aṯ taught most of the time in Mosul, where al-Baladī himself was instructed. Al-Baladī most likely lived many years in Egypt, but when he had come there, cannot be

[49] Cf. Ullmann *Medizin* p. 146 f., *GAS* III p. 318.

[50] I 247,14 ff.

acertained with security. Dagorn identifies *balad* whence al-Baladī comes with one of the four *balad*s listed in Yāqūṭ *Buldān* I 715, 10ff , namely the one that which is also called *balaṭ*, and in Persian *šahrābāḏ*, situated near Mosul.

III 2. Works

His work *On the Therapy of Pregnant Women and Children* comprises three *maqālāt* (books, sections), the first of which consists of 58 *abwāb* (chapters) about embryology and obstetrics, the second of 48 *abwāb* about treatment of infants, and the third of 61 *abwāb* about children's diseases from head to toe.[52] Maḥmūd al-Ḥāǧǧ Qāsim Muḥammad published an edition in 1980. U. Weisser, who herself had planned an edition of this important text, says the following about Muḥammads work[53]:

> Die unterdessen erschienene Edition [von Baladī *Ḥabālā*] ist für wissenschaftliche Zwecke unbrauchbar, da der Herausgeber [Maḥmūd al-Ḥāǧǧ Qāsim Muḥammad] nicht nur die ohnehin häufigen Textlücken der Handschrift, die er im übrigen gar nicht realisierte, durch eigene Zeilensprünge bei der Transkription beträchtlich vermehrt hat, sondern sich über weite Strecken die Lesarten einer oft fehlerhaften Kopie zu eigen macht, obwohl ihm deren Vorlage zur Verfügung stand. Der “textkrtische Apparat” dokumentiert nicht einmal einen Bruchteil der bedeutsamen Varianten; in einigen Fällen kann sich die Emendation unleserlicher Wörter eigentlich nur auf die eigene Abschrift der Editors beziehen, da die betreffenden Wörter in der Handschrift einwandfrei zu entziffern sind.

Having collated all the fragments of Paul of Aegina from the four major manuscripts of al-Baladī, I can but concur with prof. Weisser's judgement. Although Muḥammad gives on p. 38 ff. an overview of the five manuscripts he had at his disposal, he made extremely bad use of them.[54] The five manuscripts reviewed are: 1) Ms Dār al-Kutub al-Miṣrīya nr. ṭibb 1803 written in 1197 AH (=1782/3 AD)[55], f$^{o}$ 99$^{v}$-183$^{r}$ (designated in my apparatus as **A**), 2) Ms London, Roy. Coll. of Physicians 8, p. 277 ff.(a modern copy made from ms **A**), 3) Ms Gotha 1975, f$^{o}$ 155 ff. (**B**), 4) Ms Patna, Bankipore IV,22, nr. 11, f$^{o}$–305 ff, written in the 12 $^{th}$ cent. H[56], and 5) Calcutta, Bengal, ṭibb 10 (**C**). In his *Nachträge*[57] Sezgin mentions a sixth manuscript: Karachi, Hamdard Inst. 454/2, written in the 8$^{th}$ cent. H. (**D**). I had only access to microfilms and hardcopies made from these in order to collate the different manuscripts. I have ignored the Ms London,

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[52] Cf. Ullmann *Medizin* p. 347

[53] U. Weisser, *Zeugung, Vererbung und pränatale Entwicklung in der Medizin des arabisch-islamischen Mittelalters*, Erlangen 1983,p. 25

[54] On p. 38 he says: ذكر الاستاذ فؤاد سيزكين بان هناك خمس نسخ مخطوطة من الكتاب وقد اعتمدت في التحقيق عليها جميعا *Prof. Fuat Sezgin* [GAS III 319] *mentions five manuscripts of the book* [Baladī *Ḥabālā*]. *We have based our edition on all of them.* Given the quality of his edition, this claim seems ridiculous.

[55] This date has to be taken with some caution. Muḥammad could only read ١٩٧ and it is not completely certain if we only have to add 1000 to this date as suggested by him (n. ٣٤).

[56] This is Sezgin's dating who follows the catalogue (*Catalogue of the Arabic and Persian Manuscripts in the Oriental Public Library at Bankipore*, vol. IV ed. E. Denison Ross, Calcutta 1910, p. 42). Muḥammad reads ١٢٥٢ as the date which would correspond

Roy. Coll. of Physicians 8, since I had the manuscript it was made from (**A**), and like Muḥammad's, my microfilm of the Ms Bankipore IV,22, nr. 11 was unreadable.[58] Manuscripts **C** and **D** often concur in their readings, yet I was not able to establish a formal stemma on the basis of my collation. Since I worked entirely from microfilms and did not see any of the original manuscripts, I will not attempt a paleographical description of them nor venture any dating. I also have to warn the reader than due to the relatively pour quality of the films from the Islamic East (**C**,**D**) my readings are probably sometimes not as good as they could have been if I had had access to the originals. This said, I still think that the text I present here is a considerable improvement of that of the previous edition by Muḥammad.

## IV. Fragments

### F 1 7,8,9,10-months children

Baladī Ḥab. I 18 (p. 113,13 - 114,12 ed. Muḥ.)

الباب الثامن عشر في ذكر احوال الاجنة واختلافها في التكون والتصور والتغير في الايام والشهور من كلام فولس. وقال فولس[٥٩]

إنَّ الجنين الذي يولد في الشهر السابع يصير زبديّا في اليوم السادس ويصير دمويّا في ثمانية أيَّام اخر ويصير لحميّا في تسعة اخر ويقبل الصورة في اثنى عشر يوماً [٦٠] فإذا اجتمعت هذه الايَّام كلّها تكون خمسة وثلاثين يومًا

ويتحرك الجنين في مِثْلَي العدد وهو سبعون يومًا ويولد في ثلاثة أمثال عدد السبعين وهو[٦١] مائتان وعشرة أيَّام

والجنين الذي يولد في الشهر الثامنِ يصير زبديّا وفي[٦٢] ستة أيَّام ويصير[٦٣] دمويّا وفي[٦٢] عشرة أيَّام اخر ويصير لحميّا في تسعة أيَّام اخر[٦٤] ويقبل الصورة في خمسة عشر اخر[٦٥] واذا اجتمعت هذه الأيَّام [١١٤]يكون منها أربعين يومًا ويتحرك الجنين في مِثْلَي هذا العدد وهو ثمانون يومًا ويولد في ثلاثةأمثالها وهي مائتان واربعون يوما[٦٦]

والجنين الذي يولد في الشهر التاسع يصير[٦٧] زبديّا في ستة أيَّام ويصير دمويّا في تسعة أيام اخر ويصير لحميّا في اثنى عشر يومًا[٦٨] ويقبل الصورة في ثمانية عشر يومًا اخر فيكون من اجتماعها خمسة وأربعون يومًا

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[٥٩] om. **D**: وقال فولس.
[٦٠] **C, D**: يوما اخر.
[٦١] **C, D**: وهي.
[٦٢] **A**: في.
[٦٣] **C, D**: يصير.
[٦٤] om. **D**: اخر.
[٦٥] om. **A, D**: اخر.
[٦٦] **A, C, D**: ليلة.

ويتحرك هذا الجنين في مثلي هذا العدد[٦٩] وهو عدد التسعين ويولد في ثلاثةأمثالها وهي مائتان وسبعون يومًا
والجنين[٧٠] الذى يولد في الشهر العاشر يصير زبديّا في ستة أيَّام ودمويّا[٧١]
٢٠ في ثمانية أيَّام ولحميّا في اثنى عشر يومًا ويقبل الصورة في أربعة عشرين[٧٢] يومًا واذا اجتمعت هذه الأعداد يكون منها خمسون يوماً ويتحرك الجنين في مثلي العدد وهو عدد المائة ويولد في ثلاثة[٧٣] أمثالها وهو عدد ثلاثمائة يومًا[٧٤]
وهذا رسم يوقف منه على ذلك

Translation:

Chapter eighteen: On the conditions of the foetuses and their differences, how they come into being, take shape and change with [different] days and months from Paul's writings. Paul said:

The foetus which is born in the seventh month, becomes foamy on the sixth day, bloody after another eight days, and fleshy after another nine days. It receives its shape after twelve days. When all these days are added up, their sum is thirty-five days. The foetus moves after twice that number [of days], i.e. seventy days, and is born after thrice the number seventy, i.e. two-hundred and ten days.

The foetus which is born in the eighth month, becomes foamy after six days, bloody after another ten days, and fleshy after another nine [days]. It receives its shape after fifteen days. When these days are added up, their sum is forty days. The foetus moves after twice the number [of days], i.e. eighty days, and is born after thrice the number, i.e. two-hundred and forty days.

The foetus which is born in the ninth month, becomes foamy after six days, bloody after another nine days, and fleshy after another twelve days. It receives its shape after another eighteen days. When all these days are added up, their sum is forty-five days. This foetus moves after twice this number [of days], i.e. the number ninety, and is born after thrice the number, i.e. two-hundred and seventy days.

The foetus which is born in the tenth month, becomes foamy after six days, bloody after another eight days, and fleshy after another twelve days. It receives its shape after twenty-four days. When

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[٦٩] **D**: الجنين.
[٧٠] **A**, **C**, **D**: والجنين.
[٧١] **C**, **D**: ودميّا.
[٧٢] **C**, **D**: وعشرين.

all these numbers are added up, their sum is fifty. The foetus moves after twice the number [of days], i.e. the number one hundred, and is born after thrice the number, i.e. three-hundred days. This is the pattern, which should be applied here [?].

Paulus Aeg. *tadbīr* (Biblioteca Laurenziana plut. 74,2 f$^{o}$ 281$^{v}$)

*Δαμναστοῦ ἐκ τοῦ Περὶ κυουσῶν καὶ βρεφῶν θεραπείας*

*Περὶ τῶν γονιμῶν καὶ τελειουμένων*

*Τὸ ἑπταμηνιαῖον*

*ἀφροῦται μὲν ἐν ἡμέραις ἕξ, αἱματοῦται δὲ ἐν ἡμέραις η΄, σαρκοῦται δὲ ἐν ἄλλαις θ΄, μορφοῦται δὲ ἐν ἄλλαις ιβ΄, αἵτινες συντελεσθεῖσαι ποιοῦσιν ἀριθμὸν λε΄. κινεῖται δὲ ἐν διπλασίοσιν ο΄ τῶν τεθέντων, ἀποκυΐσκεται δὲ ἐν τριπλασίοσιν ci΄.*

*Τὸ ὀκταμηνιαῖον*

*ἀφροῦται μὲν ἐν ἡμέραις ς΄, αἱματοῦται δὲ ἐν ἄλλαις δέκα, σαρκοῦται δὲ ἐν ἄλλαις θ΄, μορφοῦται δὲ ἐν ἄλλαις ιε΄, αἵτινες συντελεσθεῖσαι ποιοῦσιν ἀριθμὸν μ΄. κινεῖται δὲ ἐν διπλασίοσιν π΄, ἀποκυΐσκεται δὲ ἐν τριπλασίοσιν cμ΄.*

*Τὸ ἐννεαμηνιαῖον*

*ἀφροῦται μὲν ἐν ἡμέραις ς΄, αἱματοῦται δὲ ἐν ἄλλαις θ΄, σαρκοῦται δὲ ἐν ἄλλαις ιβ΄, μορφοῦται δὲ ἐν ἄλλαις ιη΄, αἵτινες συντελεσθεῖσαι ποιοῦσιν φανερὸν ἀριθμὸν τὸν με΄. κινεῖται δὲ ἐν διπλασίοσιν τούτων ϙ΄, ἀποκυΐσκεται δὲ ἐν τριπλασίοσιν co΄.*

*Τὸ δεκαμηνιαῖον*

*ἀφροῦται μὲν ἐν ἡμέραις ς΄, αἱματοῦται δὲ ἐν ἄλλαις η΄, σαρκοῦται δὲ ἐν ἄλλαις ιβ΄, μορφοῦται δὲ ἐν ἄλλαις κδ΄, αἵτινες συντελεσθεῖσαι ποιοῦσιν φανερὸν ἀριθμὸν τὸν ν΄. κινεῖται δὲ ἐν διπλασίοσιν ρ΄, ἀποκυΐσκεται δὲ ἐν τριπλασίοσιν τ΄.*

## Commentary

This fragment on the different durations of pregnancies is probably the most interesting, and the most exciting we have of the paediatric treatise of Paul of Aegina. It may not be pure chance that this text is the only one that has survived in Greek, in an excerpt from a treatise called *On the Therapy of Pregnant Women and Embryos* (*Περὶ κυουσῶν καὶ βρεφῶν θεραπείας*) by an otherwise unknown author called Damnastes (maybe mispelled for Damastes?). The source for this Greek text, the Florentine manuscript plut. 74,2 fol. 281$^{b}$. The subject of embryology and duration of pregnancy has not been treated by Paul of Aegina in his *πραγματεία*, and for this reason I shall discuss this fragment at a greater length than the others.

The subject, the different stages of the foetal development according to the duration of pregnancy, has been discussed from Hippocrates onwards. What is so interesting, and to a certain extent unique in this chapter, is

and Oribasius. I shall first set out the major medical sources for this chapter, and then come to the Pythagorian material.[75]

Already the author of the treatise *De Alimento*[76] in the *Corpus Hippocraticum* has the overall division of the pregnancy into three stages, that of formation (*τύπωσις*, *ἰδέη*, *διάκρισις*), movement (*κίνησις*, *πρῶτον ἅλμα*, *μετάβασις*), and delivery (*τελειότης*, *ἔξοδος*) or miscarriage (*ἔκπτωσις*). These stages vary in length according to the duration of the whole pregnancy, and we have exactly the same division in *De Alimento* as in Paul's chapter, i.e. 35 – 70 – 210, 40 – 80 – 240, 45 – 90 – 270, 50 – 100 – 300 days.

Yet this general division does not explain how Paul of Aegina conceived of the four early stages of the foetal development, i.e. foam, blood, flesh, and shape. In the medical tradition we find no direct parallel to the pattern, but already Galen has divided the foetal development into similar (although not identical) phases. In his *De Semine*[77] he discusses four phases of the development of the foetus. During the first phase, the shape of semen still prevails, and Hippocrates calls the foetus *γονή*, and not *κύημα* as in second phase, when it becomes fleshy (*σαρκοειδής*). The next stage brings the formation of the three cardinal organs, while the rest of the body is still blurred, and the forth and final phase is that, when all the limbs are formed, and it is no longer called *ἔμβρυον*, but rather *παιδίον*.

This pattern of the four stages of the embryonic development also occurs, in a somewhat modified way, in Oribasius[78]. But while Galen was reluctant to give exact times for the different stages, Oribasius or his source Athenaeus divides them into enneads. We thus have bloody lines after nine days, clots of flesh and some fibres after 18 days, the dim shape of the spinal cord and the head after 27 days, and after 36 days the whole, fully articulate body is seen for the first time.

But none of these medical texts is an exact match for the early embryonic development according to Paul of Aegina. The reader might be surprised to learn that we have to turn to an astrological treatise to find the source for Paul's dividing this first phase into foam, blood, flesh, and shape. Censorinus, the third century A.D. Roman grammarian, about whom we know very little, composed a small treatise called *De die natali* where he discusses human life in general and more specifically its different periods and timely divisions. He relates the theory of Pythagoras on the duration of pregnancy[79]. According to Censorinus, Pythagoras distinguished between

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[75] Cf. the very thorough studies by U. Weisser on this subject: — *Zeugung, Vererbung und pränatale Entwicklung in der Medizin des arabisch-islamischen Mittelalters*, Erlangen 1983,sec. B 14; — "Yuḥannā ibn Māsawaihs Abhandlung über die Leibesfrucht und ihre Entstehung im Mutterleib" in: ZGAFW 8 (1993), p. 114-131.

[76] ch. 42 (V 112 - 116, Littrè): *Ἐς τύπωσιν λε΄ ἡέλιοι, ἐς κίνησιν ο΄, ἐς τελειότητα ϲι΄· ἄλλοι, ἐς ἰδέην με΄, ἐς κίνησιν ϛ΄, ἐς ἔξοδον ϲο΄. ἄλλοι, ν΄ ἐς ἰδέην, ἐς πρῶτον ἅλμα ρ΄, ἐς τελειότητα τ΄· ἐς διάκρισιν μ΄, ἐς μετάβασιν π΄, ἔκπτωσιν ϲμ΄. οὐκ ἔστι καὶ ἔστι· γίνεται δὲ ἐν τούτοισι καὶ πλείω καὶ ἐλάσσω, καὶ καθ' ὅλον καὶ κατὰ μέρος, οὐ πολλὸν δὲ καὶ πλείω πλείω καὶ ἐλάσσω ἐλάσσω, τοϲαῦτα καὶ ὅϲα ἄλλα τούτοισιν ὅμοια.*

[77] Ch. I 9, CMG V 3.1 p. 92,20 ff. de Lacy: *..., διελώμεθα τέτταρσι χρόνοις τὴν σύμπασαν τῶν κυουμένων δημιουργίαν κτλ.*

[78] *Lib. inc* 16.1-3 (CMG VI 2.2, [IV p. 105,28 - 106,4 Raeder]): *Ἡ δὲ πρώτη διαμόρφωϲις τῶν ἐμβρύων διαϲημαίνει περὶ τὰϲ τεϲϲαράκοντα ἡμέραϲ· ἕωϲ μὲν γὰρ θ΄ ἡμερῶν οἷον γραμμαί τινεϲ αἱματώδειϲ ὑποφέρονται· περὶ δὲ τὰϲ ὀκτωκαίδεκα θρόμβοι ϲαρκώδειϲ καὶ ἰνώδη τινὰ διαϲημαίνεται, καὶ ϲφυγμὸϲ ἐν αὐτοῖϲ εὑρίϲκεται ὁ τῆϲ καρδίαϲ. περὶ δὲ τὰϲ τρεῖϲ ἐννεάδαϲ, ὥϲ φηϲιν ὁ Διοκλῆϲ, ἐν ὑμένι μυξώδει γίνεται φανερῶϲ ἀμυδρὸϲ ὁ τύποϲ τῆϲ ῥάχεωϲ καὶ ὁ τῆϲ κεφαλῆϲ. περὶ δὲ*

[79] Ch. 7.

two forms of pregnancy, the *partus minor* (birth after a shorter period of time) where the child is delivered after 210 days, i.e. seven months, and the *partus maior* (birth after a longer period of time) where the infant is born after 274 days. For the *partus minor* we find the following pattern: after six days a milky liquid (*umor lacteus*) comes into being, and after another eight days becomes bloody (*sangineus*). After another nine days, it develops into flesh (*caro*), and after another twelve days, the body is built (*fit corpus iam formatum*). This adds up to 35, and after six times this number the child is born.

It is easy to see that this periodization corresponds exactly to that which Paul of Aegina gives for seven months children (see table 1).

**Table 1:** Comparison Pythagoras - Paul of Aegina

| | Pythagoras ap. Cens. | Paul Aeg. gr. | Paul Aeg. ar. |
|---|---|---|---|
| 6 + | umor lacteus | ἀφρός | زَبَد |
| 8 + | umor sangineus | αἷμα | دم |
| 9 + | caro | σάρξ | لحم |
| 12 = 35 | corpus formatum | μόρφωσις | قبول الصورة |
| 70 | ——— | κίνησις | تحرك |
| 210 (=6*35) | partus | ἀποκύησις | ولادة |

In this pattern the number six plays a crucial rôle. It is the basis of the whole development, and the number by which the period of formation is multiplied to calculate the date of birth (6 * 35). This, of course, is no accident, since the number six has unique qualities in Pythagorean numerology. It is a perfect number, i.e. it is the sum of its factors (1+2+3=6). It is the product of 2 and 3, the first female (even) and the first male (uneven) number, and therefore called *ἀρρενόθηλυς* (male-female)[80]. It is the most productive number (*γεννητικώτατος*, *fundamentum gignendi*), and is, therefore, most suitable to the production or creation of humans. The sequence 6 - 8 - 9 -12, involves even more proportions or numeral harmonies. Firstly, 8 is the geometrical and 9 is the arithmetical mean of 6 and 12. But the proportions 6 : 8, 6 : 9, and 6 : 12 form – as observed by Centorinus – the fourth (*συμφωνία διὰ τεσσάρων*), the fifth (*συμφωνία διὰ πέντε*), and the octave (*συμφωνία*

His expositis forsitan quidem obscure, sed quam potui lucidissime, redeo ad propositum, ut doceam, quid Pythagoras de numero dierum ad partus pertinentium senserit. primum, ut supra memoraui generaliter, duos esse partus omnino dixit, alterum minorem quem uocant septemmestrem, qui decimetducentesimo die post conceptionem exeat ab utero, alterum maiorem decemmestrem, qui edatur die ducentesimo septuagensimo quarto. quorum prior ac minor senario maxime continetur numero. nam quod ex semine conceptum est, sex ut ait, primis diebus umor est lacteus, deinde proximis octo sangineus: qui octo cum ad primos sex accesserunt, faciunt primam symphonian *διὰ τεσσάρων*. tertio gradu novem dies accedunt iam carnem facientes. hi cum sex illis primis conlati sescuplam faciunt rationem et secundam symphonian *διὰ πέντε*, tum deinceps sequentibus duodecim diebus fit corpus iam formatum. horum quoque ad eosdem sex conlatio tertiam *διὰ πασῶν* reddit symphonian duplici rationi subjectam. hi quattuor numeri VI VIII VIIII XII coniuncti faciunt dies XXXV. nec inmerito senarius fundamentum gignendi est. nam eum *τέλειον* Graeci, nos autem perfectum vocamus, quod eius partes tres, sexta et tertia et dimidia, id est unus et duo et tres, eundem ipsum perficiunt. sed ut initia seminis et lacteum illud conceptionis fundamentum primitus hoc numero absolvitur, sic hoc initium formati hominis et velut alterum maturescendi fundamentum, quod est quinque et triginta dierum, sexies ductum, cum ad diem ducentesimum decimum peruenit, maturum procreatur.

[80] [illegible]

*διὰ πασῶν*) respectively.

It might seem strange that a physician like Paul of Aegina considered numerology in relation to the development of the child in the womb. There was little hard evidence to support his views, and already Hippocrates[81] was aware that periods of pregnancy could vary. It was a very common idea that the world as a whole (the *macrocosm)* is reflected in the human nature (*microcosm*). The heavenly bodies move according to mathematical laws, so why shouldn't human development. The syncretical milieu of seventh century Alexandria may also have influenced Paul of Aegina. Even Kepler, the great scientist and astronomer of the Renaissance, did not recoil from comparing the movement of the planets to different chords and triads in his *De Harmoniis Mundi*.

I am not going to discuss the different proportions involved in the cases for eight, nine, or ten months children, but they are less rich than those for seven months children. This is not surprising, since Paul of Aegina had a perfect number sequence for seven months children from his Pythagorean source. But he wanted to apply this also to the other periods of pregnancy which he knew from Hippocrates. So, the Pythagorean numerology does not work out so well for the three other stages of pregnancy which Hippocrates describes.

## F 2 — Milk of the wet-nurse — Dentition

Baladī *Ḥab.* III 1 (p. 227,9-19)

ذكر ما قاله فولس[٨٢] في كتابه[٨٣]

وقال فولس في كتابه في تدبير الصبيان اذا اغتذت الداية بأغذية رديئة فسد لبنها ومرضت وانتقلت عن المزاج المحمود وغذت الصبي بفاسد[٨٤] لبنها فأورثه أسقاما

٥ ثم قال ويصيب[٨٥] الصبيان اكثر ذلك السكتة اذا احتبست بطونهم ثم ذكر نبات الاسنان فقال وقد يعرض لهم عند ذلك ورم اللثة[٨٦] والحَفَر[٨٧] والاثار[٨٨] ويحمر اكثر ذلك وتصيبهم حكة في آذانهم وتسيل[٨٩] منها رطوبة وبعض الصبيان يعتريهم[٩٠] وجع العينين وتستطلق[٩١] بطونهم وربما يعرض لهم ايضا

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[81] Cf. supra n. 76. I shall not discuss the problem of a Pythogorean influence on Hippocratic embryology as suggested by W. Burkert, *Lore and Science in Ancient Pythagoreanism*, Harvard 1972, p. 262 f.

[٨٢] **C**: ما ذكره فولس. **B**: ما ذكره روفس. **A**: ذكر ما قاله روفس

[٨٣] **B, C, D**: ذلك

[٨٤] **C, D**: بفساد

[٨٥] **A, C, D**: فيصيب

[٨٦] om. **D**

[٨٧] **C, D**: الخيقن (؟)

[٨٨] **D**: والادنار (؟)

التشنج

١٠ ثم ذكر الورم العارض في عين الصبي والبياض والورم والقروح العارضة في الآذان وورم الدماغ والتفزع والحُمَّى والسيلان[٩٢] والعطاس والسعال[٩٣] واستطلاق البطن واعتقالها وضروب الدود تَحْدُثُ في امعاء الصبي والخراجات والبثر الذي يعرض[٩٤] للصبيان والقروح التي تكون في رؤوسهم[٩٥] وسحج الفخذين وخروج مقعدة الصبي وخروج سرته *

The account of what Paul said in his book. Paul said in his book *On the Therapy of Children*:
If the wetnurse is fed with spoiled food, her milk becomes corrupted, she becomes ill and no longer has a good temperament. She then feeds the child with her corrupted milk and so transfers ailments to him.
Then he said: Apoplexy often befalls children if their bowls are obstructed.
Then he discussed dentition and said: At the same time a swelling of the gums, pitting, and traces [of teeth] befall them, and often they become red. Itching in their ears befalls them, and moisture flows from them [i.e. the ears]. A pain in the eye befalls some children, and they have diarrhoea. Sometimes a cramp spasm also befalls them.
Then he discussed the swelling which occurs in the eye of the child, the leucoma, the swelling, the ulcers which occur in the ears, the swelling of the brain, the anxiety, the fever, the weeping discharge, sneezing, coughing, the diarrhoea, the constipation, the different sorts of worms which occur in the intestines of the child, the skin rashes and pustules that befall the children, and the ulcers that exist on their heads, the abrasion of the thighs, and the prolapse of the rectum and the protrusion of the navel.

## Commentary

This fragment consists of four part, the first two of which seem to be more closely related to one another. In line ٢ - ٤ we have a little section on the wet-nurse and her diet, in line ٥ a note on the link between constipation and apoplexy also found in **F 21** ٣٦, which might stem from the same context, in line ٦ - ٩ a part of Paul's discussion of dentition, the greater part of which is preserved in Baladī *Ḥabālā* III 32 (**F 3**), and finally the list of other topics contained in the *Therapy* which we have discussed earlier (*vid. supra* p. 8).
L. ٣ لبنها] *Laban* generally means *milk* in classical Arabic (cf. WKAS II b 156 4 ff), and corresponds to

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[٩١] **C**, (**D**): يـ
[٩٢] **C**: السلاق. **D**: السماف ؟؟
[٩٣] om. **C**

Greek *γάλα*. But in **F 3 ١٩** *laban* denotes a sort of solid milk product, probably cheese, since it is held in the hand of the child. This latter usage which I could not find in WKAS *ibid.* seems to develop from phrases like: اما الجبن فانه لبن ينعقد ويجمد ويصير جبنا *ğubn (cheese) is milk that coagulates, curdles, and becomes ğubn*; for *τυρὸς γάλα πεπηγός ἐστι*, Ğālīnūs Mufr. XII 169, -3 f quoted in WKAS 158 a 39 ff. المزاج المحمود] For *al-mizāğ al-maḥmūd good* or *laudable temperament* see J. Derek Latham, "'*MAḤMŪD*' and 'laudable'" in: *JRAS* n.s. 1977, p. 31-40, esp. 35.

L. ٥,٧ اكثر ذلك] This expression, not recorded in WKAS 68 b 25 ff., is quite common in the translations of Paul of Aegina, e.g. Par. gr. 2293 f° 196$^{r}_{2\,f.}$ واكثر ذلك يكون من سقط الأجنّة corresponding to PAeg. III 61.1 (I p.275,9): *ὡς τὸ πολὺ δὲ ἐκ τῶν ἀμβλώσεων*; or 198$^{r}_{9\text{-}11}$ اكثر ذلك من ذاته ويكف [الولاد التامّ] corresponding to PAeg. III 62.1 (I p.277,9): *αἵτινες* [sc. *αἱ τέλειαι ἀποτέξεις*] *ὡς τὸ πολὺ καὶ αὐτομάτως παύονται*; or Rāzī *Ḥāwī* t. XI 6,8 f.: وتكون اكثر ذلك مع حمى corresponding to PAeg. IV 57.2 (I p. 382,17 f.): *σὺν πυρετῷ κατὰ τὸ πλεῖστον*.

The choice of the wet-nurse, and the testing and improvement of her milk was of the utmost concern to the Ancients. Soranus devotes more then ten pages (in the edition by I. Ilberg, CMG IV) to these questions, treating them in chapters entitled *Περὶ τροφῆς*, *Περὶ ἐκλογῆς τιτθῆς*, *Περὶ δοκιμασίας γάλακτος*, *Πῶς διαιτητέον τὴν τροφόν*, and *Τί ποιητέον σβεννυμένου τοῦ γάλακτος ἢ φθειρομένου ἢ παχυνομένου ἢ λεπτυνομένου* (*Gynaecia* II 17-29 [p. 64-75 Ilberg]), although Plutarch was against the employment of wet-nurses[96]. (Pseudo-)Oribasius, too, treated these subjects in a similar sequence of chapters, drawing on his predecesors Galen, Mnesitheus, Antyllus and Rufus.[97] The idea found in this first part that the the milk of the wet-nurse if of bad quality passes ailments onto the child, can already be found in Hippocrates.[98] Aulus Gellius relates a speech by the philosopher Favorinus against mercenary wet-nursing, where the latter argues that the milk, just as the semen, bestows physical and mental characteristics upon the child.[99] That the food the wet-nurse eats has a great influence on the quality of the milk, was neither unknown to Soranus nor to Oribasius (or his source Antyllus), who were both quick to emphasize the importance of this subject.[100]

Rufus deals extensively in his *Therapy of Children* with the subject of breast-feeding and the quality of the milk. He thinks that boils are caused ultimtely by bad milk (**F (R) 10 a ٣**;**F (R) 10 b ١**), that it is dangerous for the woman to stop the period of lactation artificially (**F (R) 12**), and gives all sorts of advice in case of curdling milk (**F (R) 13**).

Paul of Aegina himself has touched upon the subject of the milk of the wet-nurse in his *πραγματεία* (I 3), and al-Baladī gives an excerpt from this chapter in II 22 (p. 195,-3 ff. Muḥ: قال بولس : ويحمد من اللبن ايضا ان يمتحن على هذاالوجه وهو ان يحلب منه في إناءٍ زُجاجٍ ويُلقَى فيه من المُرِّ مسحوقا مقدرا معتدلا الخ *Paul*

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[96] *De liberis educandis* 5 (3 B): *Περὶ δὲ τροφῆς ἐχόμενον ἂν εἴη λέγειν. δεῖ δέ, ὡς ἐγὼ ἂν φαίην, αὐτὰς τὰς μητέρας τρέφειν καὶ τοὺς μαστοὺς ὑπέχειν· κτλ.* Cf. R. Etienne, "Ancient Medical Conscience and the Life of Children" in: *Journal of Psychohistory* 4 (1976), p. 131-161, p. 147-9.

[97] *Lib. inc.* ch. 29-34 (CMG VI 2.2 p. 120-129 Raeder). As already assumed by Ilberg *Rufus* p. 30, the chapter 31 *Περὶ ἐκλογῆς τροφῆς* is certainly taken from Rufus (**' F (R) 13**).

[98] *De morbis* IV 55 (VII 600 Littré): *Περὶ δὲ λιθίδος, ἀρχὴ μὲν ἐγγίνεται ἀπὸ τοῦ γάλακτος τῇ νούσῳ, ἐπὴν τὸ παιδίον θηλάζῃ γάλα μὴ καθαρόν· κτλ.*

*said: It is also good to test the milk in the following way: milk some of it into a glass vessel, and throw upon it a moderate quantity of pulverized myrrh etc.*) corresponding to PAeg I 3 (I p. 9, 27 ff. Heiberg: *δοκιμάζειν δὲ καὶ οὕτως· ἐγχέοντα τοῦ γάλακτος εἰς ἀγγεῖον ὑέλινον ἐμβάλλειν ταμίσου τὸ σύμμετρον κτλ.*).

The next bit on the link of apoplexy and constipation will be dealt with in the chapter on apoplexy (’ **F 21**). Since we have the context of the quote on dentition in **F 3**, we will discuss it there. Finally the list of subjects has already been dealt with in the introduction (’ p. 8).

## F 3 Dentition

Baladī *Ḥab.* III 32 (277,-3 - 279,10)

ذكر ما قال[١٠١] فولس في ذلك [في الاوجاع التي تعرض للطفل عند نبات الاسنان وعلاج ذلك]

قال[١٠٢] فولس في كتابه في تدبير الاطفال وتربيتهم

تنبت اسنان الصبي في الشهر السابع فيعرض له عند ذلك ورم في اللثة والحَفَر[١٠٣] والاثار ويحمر[١٠٤] اكثر ذلك و[١٠٥]يصيب حكة في اذنيه وتسيل منها رطوبة [٢٧٨] ويعرض للصبيان ويعتريهم[١٠٦] مع وجع العينين وتستطلق[١٠٧] بطونهم وربما عرض لهم التشنج ايضا[١٠٨]

فينبغي اذا اصاب الصبي ذلك بان لا تطعمه شيئا يحتاج الى المضغ وتدلك لثته بالمخاخ في الحمام وتليّنها بشحم الدجاج وبدماغ ارنب وبدماغ كبش مطبوخ او مشوى ويطلى عليه عسل

فاذا طلعت الاسنان فينبغي ان تضع[١٠٩] على العنق والرأس والجبين صوفا نقيا[١١٠] وتصبّ عليه دهن لوز ومر حار ويقطّر ايضا في الاذنين من الدهن ويحمى الصبي من كثرة الغذاء ويقلل طعامه ويأمر المرضع ان لا تشرب

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١٠١ **B, C, D**: قاله

١٠٢ **C, D**: وقال

١٠٣ **A**: الحبن. **C, D**: والعينين

١٠٤ **A, C, D**: ويحم

١٠٥ ex F 2 ٧ و coni.

١٠٦ **A**: ويقربهم

١٠٧ **A**: ويطلق. **C, D, B**: تستطلق. coni.: وتستطلق.

١٠٨ **A, B, C**: ايضا التشنج. **D**. om. ايضا.

شيئا سوى الماء وان تأكل من الطعام بالماء الحار ويسيل بطنه
فان اصابه استطلاق البطن فاحبسْ[111] بطنَه بالاضمدة التي تحبس[112] البطن مثل الكمّون والأنيسون وبزر الكرفس وبزر الورد فان احتبس بطنُه جدا حتى لا يجذب شيئا فاعمل له شيافا[113] من الماء والعسل فان عرض له تشنج قد[114] ينفعه ان يعالج بدهن السوسن وبدهن قثاء الحمار[115]
وكلما يسخن ولإن الصبي اذا نبتت[116] اسنانه يعضض أصابعَه فينبغي ان يعطيه شيئا يمسكه بيده مثل اصول[117] السوسن المقشور[118] واللبن, وقد ينفع ايضا من القروح ووجع اللثة السمن اذا طليت به مع العسل
واما من الادوية التي تنفع بطبعها وخاصّتها فأصل قثاء الحمار فانه يعين على نبات[119] الاسنان اذا وضع في ذهب او فضة وعلّق على عنق الصبي وكذلك اصل العوسج يابسا يعمل به كذلك وأدوية يشمّها الصبي وتنفخ[120] في منخرَيْه أعني اصول العوسج يسحق وينخل وينفخ في الانف فانه يسكن عنه الوجع بإذْن الله تعالى[121]
واصل العوسج وسن قنفذ برّيّ يصير في فضة ويعلق على الصبي يسكّن وجعَ اسنانه

وقال في كناشه عند ذكره نباتَ الاسنان اذا وضع في ذهب او فضة وعلق على عنق الصبي وكذلك اصل[122] العوسج يابسا يعمل به كذلك وادوية يشمّها الصبي وينفخ في منخريه[123] اعني اصل العوسج يسحق ويشم[124] وينفخ في الانف

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**A**[111]: فاحتبس
**A**[112]: تحتبس
**A**[113]: سيافا
**C, D**[114]: فقد
**A**[115]: حمار
**A, C**[116]:تنبت
**C, D**[117]: اصل
**A, C, D**[118]:المقشر
**D**[119]:انبات
**C**[120]: وينفخ
om. **C**[121]:تعالى
om. **A**[122]:كذلك

فانه يسكن عنه الوجع بإذْن الله عزّ وجل[١٢٥]
وقال في كناشه[١٢٦] عند ذكره نبات الاسنان قريبا ممّا ذكره ههنا من التدبير ولما في بعضه من الزيادة وان كانت يسيرة فلا بأسَ بان يحضر ذلك ههنا فكان [٢٧٩] مما ذكره هناك ان قال الخ ٣٥

Translation

The account of what Paul said about this [about the pains that befall the child during dentition and its therapy].

Paul said in his book *On the Therapy and Upbringing of Infants*:

The teeth of the child grow in the seventh month, and during that time a swelling in the gums, pitting , and traces [of the teeth] occur in them, and often they [the gums] become red, while itching occurs in his ears, and out of them flows a moisture. It happens to children, and it befalls them along with pain in the eye, and diarrhoea. Sometimes a cramp befalls them, too.

If this occurs in the child, you should not feed him with anything that needs chewing. Rub his gums with bone-marrow during the bath, and sooth it with chicken fat and hare brain and ram brain cooked or grilled, and wax it with honey.

If the teeth come forth, it is necessary that you put on the neck, the head and the forehead clean wool, and that you pour on it oil of almonds and warm myrrh. Oil should also be dripped in the ears. The child is to be protected from a great quantity of food, and his diet reduced. The wet-nurse should be ordered not to drink anything except water, and she should eat her food with warm water, [then] his bowls will flow [normally].

If diarrhoea befalls him then, obstruct his bowls with dressings which obstruct the bowls like cumin, anise, celery seed, and rose seed. If his bowls are greatly obstructed, so that he does not expel anything, than make for him a suppository from water and honey.

If a cramp befalls him, it might benefit to treat him with oil of lily and oil of cucumber. Whenever he becomes feverish, and especially if the child, when the teeth grow, bites his fingers, then it is necessary to give him something to hold in his hand like peeled roots of lilies and *laban*. What might also be useful against ulcers and pain of the gums, is clarified butter spread on it together with honey.

As regards the remedies which are naturally and specially useful [for this], they are: Cucumber root, since it specifically encourages the growth of teeth, when encased in gold or silver and

hung around the neck of the child, and also boxthorn root, dried, which is used in this way, and remedies that the child sniffs and that are blown into his nostrils, i.e. roots of boxthorn, powdered, sieved, and blown into the nose. Then the pain will cease if God most high so chooses.

The root of boxthorn and the tooth of a wild hedgehog, which encased in silver and hung around the child, alleviates the pain of his teeth.

And he says in his *kunnāš* in his account of dentition: ... when encased in gold or silver and hung around the neck of the child, and also boxthorn root, dried, which is used in this way, and remedies that the child sniffs and that are blown into his nostrils, i.e. roots of boxthorn, powdered, sniffed, and blown into the nose. Then the pain will cease, if God — Almighty — so chooses.

And he says in his *kunnāš* [*πραγματεία*] when discussing dentition something close to what he discussed here in the *Therapy*. In some part of it, there is an addition, althought it might be small. There is no objection to it being present here, and what he said there is, etc. [follows PAeg I 9 (I p. 12,7-19)]

## Commentary

This chapter the beginning of which is also quoted in **F 2** ٦-٩, deals with the tricky subject of dentition. Firstly (l. ٤-٧) the general characterists and possible complications are given, then general (l. ٨-١٠) and more specific (l. ١١-١٤) provisions are set out, and finally Paul discusses diarrhoea and constipation (l. ١٥-١٨). More general provisions follow (l. ١٩-٢١) with a list of remedies (٢٢-٢٧). After this al-Baladī quotes a passage (l. ٢٩-٣٢) nearly identical with l. ٢٣ (واذا وضع في الخ)-٢٦ under the heading *kunnāš* i.e. implying that this is taken from the *πραγματεία*, which seems highly unlikely since it is not in our Greek text. Finally a real quote from this *πραγματεία* is given (PAeg I 9 [I p. 12,7-19 Heiberg]).

L. ٤ وَرَمٌ في اللِّثَة] *Waram* normally means just swelling, but the expression *waram ḥārr* is equivalent to the Greek *φλεγμονή*, *inflammation* e.g. Par. Gr. 2293 f$^{o}$ 200$^{r}_{2}$: ان الورم الحارّ يعرض للرحم corresponds to PAeg. III 64 (I p.279,26 Heiberg): *Ἡ φλεγμονὴ τῆς ὑστέρας κτλ.*, but *waram* alone can also signify *inflammation*, Par. Gr. 2293 f$^{o}$ 201$^{r}_{1}$: واذا كان الورم في الجوانب corresponding to PAeg. III 64 (I p.280,12 Heiberg): *τῶν δὲ πλευρῶν φλεγμαινόντων*. Since this seems to correspond to the beginning of Paul's chapter on dentition in the *πραγματεία* (I 9 [I p. 11,28 f. Heiberg]: *Ὀδοντοφυίαι γίνονται μὲν περὶ ἕβδομον μῆνα, συμβαίνουσι δὲ τότε φλεγμοναὶ τῶν οὐλων κτλ.*) it is likely that the meaning here is *inflammation*.

L. ٥ والحَفَر] *ḥafar* or *ḥafr* means *pitting*. Cf. Ullmann *ZDMG* 114 (1964) p. 201 below اكثر ذلك] ' ad **F 2** ٥.٧.

L. ١٥ أَضْمِدَةٌ] The broken plural of ضِمادٌ according to the pattern *fi'ālun – af'ilatun* (cf. Wright I 212 B), denoting any *bandage* or *dressing*. Cf. also Ullmann *Medizin* p. 298.

L. ١٦ كَمُّون] *Cumin, Cuminum cyminum*, gr. *κύμινον*; cf. WKAS I 365 a 24 ff & I 578 a 36 ff and Dietrich *Diosc. Triumph.* III 57. انيسون] *Aniseed, Pimpinella anisum*, gr. *ἄνισον*; vgl. Dietrich *Diosc. Triumph.* III 54. كَرَفْسٌ] *Celery*, *Apium graveolens*, gr. *σέλινον*, a Syriac loanword (<ܟܪܦܣܐ); cf. WKAS I 135 b 27 ff & 560 a 30 ff.

L. ١٧ شِيَافٌ] means *suppository* here (cf. Dozy I 804 a). It is a Syriac loanwork (<ܫܦܝܐ) denoting both *collyrium* and *suppository* (cf. Brock. *Lex. Syr.* 765 a). The Greek equivalent is *βάλανος* as can be seen from Baladī *Ḥabālā* III 45 (p. 306, paen. f. Muḥ.: واذا تولد هذا [الدود الدقيق] في الصبيان فينبغي ان يخرج ذلك بشياف) and Rāzī *Ḥāwī* XI 9,7 (فاستعمل للأطفال الشيافة) corresponding to PAeg I 57.15 (I p. 387,3 Heiberg: *κενωτέον οὖν αὐτὰς* [sc. *τὰς ἀσκαρίδας*] *ἐπὶ μὲν τῶν νηπίων βαλάνοις*).

L. ١٨ سَوْسَن] *sausan* means *(white) Lily, Lilium candidum*, gr. *κρίνον* (Dietrich *Diosc. Triumph.* III 96). قثاء الحمار] *qiṯṯā' al-ḥimār* corresponds to gr. *σίκυος ἄγριος*, eng. *wild cucumber*; cf. Dietrich *Diosc. Triumph.* IV 139.

L. ٢٠ واللبن] Here clearly denoting *(solid) cheese*, ' ad **F 2** ٣.

L. ٢٥ عَوْسَج] *Boxthorn*, *Lycium arabicum*.

Dentition was considered to be one of the major problems linked to the natural development of the child, being the cause of many ailments occurring during that age, although we now know that they are merely concomitant.[127] Already Hippocrates mentions possible complications at this age in *Aphorism* III 25[128] and under his name a very short treatise *Περὶ ὀδοντοφυίης* (probably written in the first century BC or AD) has come down to us. Galen has commented upon this aphorism (XVI B 631 ff. Kühn) and e.g. mentions hare brain as a remedy against it elsewhere (XII 874 Kühn), a usage also propagated in this fragment (l. ٩). A more important predecessor for Paul's discussion is Soranus who devoted a whole chapter to the problem (*Gyn.* II 49 [p. 87,30 ff. Raeder]). Soranus treatment is the basis for what we find in the later compilators Oribasius (*Syn. ad Eust.* V 9 [CMG VI 3 p. 156,14 ff. Raeder]) and Aetius (IV 9 [CMG VIII 1 p. 364, 17 ff. Olivieri]). Paul himself has treated the subject in his *πραγματεία* (I 9 [I p. 11, 27 ff. Heiberg]). Although — as can well be expected — we sometimes find similar provisions in both the *πραγματεία* and the *Therapy*, he sometimes gives additional information in the latter. For example in line ٤-٧ a number of symptoms accompanying the dentition are mentioned, some of which are not included in the beginning of the chapter in the *πραγματεία*, namely itching in the ears, moisture flowing from the ears, pain in the eyes, and diarrhoea, all of which are in Aetius' treatment of the subject (IV 9 [I p. 364, 21 ff.]): *παρέπεται δὲ καὶ κνησμὸς τῶν ἀκουστικῶν πόρων καὶ τὰ ὦτα ὑγραίνεται. ἔνιοι δὲ καὶ ὀφθαλμίαις ἁλίσκονται ... ἐκταράττεται δὲ τοῖς πλείστοις ἡ γαστὴρ κτλ.*). Most of the treatments set out in l-٨-٢١ are also mentioned in Paul's *πραγματεία* (*ibid.*), yet the provisions in l. ٢٢-٢٨ (partly repeated in l. ٢٩-٣٢) are quite peculiar. To hang roots of wild cucumber and boxthorn encased in

[127] Cf. R. Joly, *Hippocrates: De la dentition*, in: *Hippocrate*, t. XIII, Les Belles Lettres, Paris 1978, p. 18, and A. Gil'adi, *Children*

silver or gold in order to stimulate the growth of the teeth, seems quite a magical practice. But here again, Aetius, not recoiling from more popular or even magical practise, is the source[129].

The part repeated under the heading *kunnāš* (*πραγματεία*) might be an addition from a different source, or a simple repetion, since this recipe is not found in the Greek text. The fomula: بإذْن الله عزّ وجل *God — Almighty — willing* might point into the same direction. From l. **٣٣-٣٥** we see that al-Baladī himself was well aware that although Paul treats dentition here and in his *πραγματεία* similarly, there is *an addition* (زيادة) in the *πραγματεία*.

## F 4 Inflammation of the Eye

Baladī *Ḥab.* III 19 (p. 260,5-7)

ذكر ما قاله فولس في ذلك [في الرمد العارض لأَعْيُنِ الصبيان ومداواته]

قال فولس اذا حدث بأَعْيُنِ الصبيان ورم ورمد فخذ حضضا هنديا[١٣٠] بلبن واطله على الجفون وقطر منه في العين يسيرا رقيقا ؟ واطل ايضا على الجفون[١٣١] شياف[١٣٢] الورد ويقال له باليونانية دياورودون *

Translation

The account of what Paul said about this [the ophthalmia that befalls the eyes of children and its treatment]. Paul said: If a inflammation and ophthalmia occurs in the eyes of the children, take Indian lycium with milk and apply it onto the eyelids, and drip a tiny bit of it into the eye. Apply also onto the eyelids the rose collyrium called in Greek *διάροδον*.

## Commentary

The subject of this fragment seems to be the inflammation (*φλεγμονή*) of the eye and not ophthalmia (*ὀφθαλμία*), two eye conditions distinguished by Paul in his *πραγματεία* (III 22.2 *Περὶ ταράξεως καὶ ὀφθαλμίας* and III 22.3 *Περὶ φλεγμονῆς*) as one could think reading the Arabic text (*vid. infra*). The subject is treated very briefly.

L. ٢ ورم ورمد] For a discussion of the meaning *waram* ’ ad **F 3** ٤. رَمَد seems to be a gloss, or might have slipped into the manuscript tradition from a scribal error, since رمد and ورم are easily confused.

[129] IV 9 (I p. 365,6 ff. Olivieri): *φασὶ δὲ φυσικῶς βοηθεῖν τοῖς ὀδοντιῶσι παιδίοις κολοκυνθίδος ἀγρίας ἡ ῥίζα ἐν χρυσῷ ἢ ἀργυρῷ σωληναρίῳ φορουμένη καὶ ἡ τοῦ βάτου ῥίζα καὶ ἔχεως ἄρρενος μάλιστα τὸν ὀδόντα λαβὼν καὶ ἐμβαλὼν τῷ ἀργυρῷ περίαπτε· κτλ.*

[١٣٠] **B**: هند

حُضَضٌ هِنْدِيٌّ] *Ḥuḍaḍ hindī* is *Indian lycium*, gr. *λύκιον Ἰνδικόν*, which is difficult to identify exactly; cf. Dietrich *Diosc. Triumph.* I 69.

L. ٤ شياف] Here clearly *collyrium*; ’ ad **F 3** ١٧. شياف الورد *Rose collyrium* is a loan translation of *διάροδον*. Do we have to assume that the *διάροδον* the recipe of which is given in PAeg. VII 12.6 (II p. 315,11-14), and which also contains *λύκιον Ἰνδικόν* is meant here? Paul specifies in his *πραγματεία* (III 22.3 [I p. 171,29 Heiberg]) that one should use *τὸ τοῦ Νείλου διάροδον* (recipe in PAeg. VII 16.41).

Eye conditions in general are a large area of study, and it cannot be the objective here to give an overview over the different aspects of the treatments. Inflammation (gr. *φλεγμονή*) was treated by Paul in his *πραγματεία*(III 22.3 [I p. 171,25 ff. Heiberg]), and he draw on sources such as Oribasius (*Synops. VIII* 39 f.) and Aetius (VII 4).

## F 5 Moisture in the Ear

Baladī *Ḥab.* III 22

ذكر ما قال فولس[١٣٣] في ذلك [في الرطوبة العارضة في آذان الصبيان وعلاجها]

قال[١٣٤] فولس[١٣٣] : اذا عرض في آذان الصبي رطوبة فأذف شبا مع[١٣٥] مطبوخ عتيق واغمس فيه صوفة وجَفِّفْه ثلاثَ مراتٍ ثم ضع[١٣٦] ذلك الصوف في آذان الصبي وهو حار واسحق زعفران مع مطبوخ عتيق وقطر في آذان[١٣٧] الصبي

٥ فان كان في الأذن قرحة او لحم زائد فاطله اولا بموساس[١٣٨] كما وصفت *

وقال في كناشته : الخ

Translation:

The account of what Paul said about this [about the moisture that occurs in the ears of the children, and its treatment]. Paul said: When moisture occurs in the ears of the child, then mix alum with old, cooked [wine], and dip a piece of wool in it, and dry it out three times, then put that wool into the ears of the child, while being warm. Pulverize saffron with old, cooked [wine], and drip it into the ears of the child. If there is in the ear an ulcer or an excess flesh, then apply first of all the Mousas pastille as I have described.

Paul said in his *kunnāš*: (follows PAeg. I 12 [I p. 13,1-4]).

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[١٣٣] **C**, **D**: روفس

[١٣٤] **D**: وقال

[١٣٥] **C**, **D**: شيئا من. **B**: شيئا مع. Cf. Mağūsī *Malakī* II 54,-4.

[١٣٦] **A**: صنع

## Commentary

In this chapter moisture in, or discharges from, the the ears are dealt with. Two recipes are given, and then Paul recommends the Mousas-pastille in connection ulcers or excess flesh in the ear. This latter part is repeated with slight variations in **F 6**.

L. ٢ فأذف] *aḏāfa* is a variant for *adāfa* in the sense of *to mix (a medicine),* cf. Lane s.vv. مطبوخ] *Maṭbūḫ* alone very often denotes wine reduced by cooking.

L. ٥ موساس] *qurṣ Mūsās* is *ὁ Μούσα τροχίσκος*, the recipe of which is given in PAeg VII 12.18 (II p. 317,19-21). Cf. Ullmann *Medizin* p. 298.

Paul of Aegina deals with the problem of moisture in the ears of the child in his *πραγματεία* (I 12 "*Πρὸς τὰς τῶν ὤτων ὑγρότητας*."[I p. 13,1-4 Heiberg]), and indeed al-Baladī quotes this chapter just after this fragment from the *Therapy*. Yet his immediate source for the treatments set out here is again Aetius (IV 12.2)[139] where he recommends the triple drying of the wool and the treatment with the Mousas pastille, neither of which are mentioned in Paul's *πραγματεία* or in its source Oribasius (V 12). Rufus treats the subject more amply in his *Therapy of the Children* (*'* **F (R) 5**), although the basic medication remains the same.

## F 6 Proliferating Flesh in the Ear

Baladī *Ḥab.* III 25 (p. 266,1-8)

الباب الخامس والعشرون في اللحم النابت في آذان الصبيان ومداواته

انه قد يعرض في آثار القروح في آذان[١٤٠] الصبيان دائما لحم زائد وهذا في الصبيان الصغار اكثر لرطوبة[١٤١] ابدانهم وقوة النموّ للطبيعة[١٤٢] فيهم وقد ذكر فولس ذلك فيما صنعه في[١٤٣] تدبير الاطفال وتربيتهم

٥ قال[١٤٤] وان كان في الاذن لحم زائد فاطله بموساس [' n. ١٣٨] مذاف[١٤٥] بمطبوخ عتيق ثم استعمل اقراص موساس[١٤٦] كما وصفت بزبد مذافة عقيد[١٤٧] العنب

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[139] *βρέχων ξήραινε... πάλιν βρέχων ξήραινε... καὶ τὸ αὐτὸ ἐκ τρίτου ποιήσας κτλ.*, and *πρὸς δὲ τὸ ἐν τοῖς ὠσὶν ἕλκη χρῶ τροχίσκῳ τῷ Μούσα ... εἰ δὲ ὑποσάρκωμα εἴη ... χρῶ τῷ Μούσα ὡς προσείρηται.*

١٤٠ **C**: اذن

١٤١ **D**: رطوبة

١٤٢ **D**: وللطبيعة

١٤٣ **C**: من

١٤٤ **C**: وقال

وخل[148] قليل *
وقال في كناشه ينبغي ان الخ

Translation

The twenty fifth chapter on flesh which forms in the ears of the children, and its treatment.
Sometimes in the ears of children excess flesh occurs constantly in the remnants of ulcers. This is more frequent in young children because of the moistness of their bodies and the faculty of growth belonging to their constitution. Paul has mentioned this in what he composed in the *On the Therapy and Upbringing of Infants.* He said: If there is excess flesh in the ear, then apply the Mousas[-pastille] mixed with old, cooked wine. Then use the pastilles of Mousas, as I described, with cream mixed with boiled down wine and a little bit of vinegar.
He said in his *kunnāš* etc. [follows PAeg. III 23.7 (I p 190,10-12)].

## Commentary

Proliferating flesh (*ὑποσάρκωμα*), or fungous flesh, as F. Adams[149] translates it, is the subject of Baladī*Ḥabālā* III 25, where al-Baladī first gives the aetiology for this phenomenon, and then quotes the treatment from Paul of Aegina's *Therapy* and *πραγματεία*. Although it is not completely clear, al-Baladī seems to rely for the aetiology on Paul's *Therapy*, too.

L. ٥ عقيد العنب. بريد] is cooked wine (i.e. wine reduced to one fourth by cooking). Cf. b.-Baiṭār *Ǧāmiʿ* III 129,2f. (nr. 1571); IV 160,22.

L. ٥-٦ قُرْص موساس, موساس] *Ὁ Μούσα τροχίσκος*, ’ ad **F 5** ٥.

Paul discusses the proliferating flesh in his *πραγματεία* (III 23.7 [I p. 190,10-12 Heiberh]) which al-Baladī quotes just after this fragment. Unlike the discussion in the *πραγματεία*, this fragment from the *Therapy* is based on Aetius,as we have already seen (’ **F 5**, cf. Aetius VI 83).

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١٤٧ **A**: بعقيد

١٤٨ **D**: [illegible]

## F 7 Ulcers in the Ear

Baladī *Ḥab.* III 24 (p. 265,-3-ult.)

ذكر ما قاله فولس في ذلك [في القروح العارضة في آذان الصبيان ومداواتها]

قال[١٥٠] فولس : فان كان في اذن الصبي قرحة فاستعمل اقراص موساس مذافة بعقيد العنب وخل قليل وقطر[١٥١] في اذن الصبي منه *

Translation

The account of what Paul said about this [about the ulcers which occur in the ears of the children, and their treatment]. Paul said: If there is in the ear of the child a ulcer, then use pastille of Mousas mixed with boiled down wine and a bit of vinegar, and drip some of it into the ear of the child.

### Commentary

This short fragment is nothing but the repetition of what we have already seen in **F 5** and **F 6**.

## F 8 Inflammation in the Ear

BH III 23 (p. 265,6 f. Muḥ)

ذكر ما قاله فولوس[١٥٢] في ذلك [في الاورام العارضة في اذان الصبيان ومداواتها]

وقال فولس[١٥٢] اذا عرض في اذن الصبي ورم قطر[١٥٣] في اذنه بياض بيضة بلبن امراة وخراطين ودهن ورد

Translation

The account of what Paul said about this [about the swellings which occur in the ears of children, and their treatment]. Paul said: If there occurs an inflammation in the ears of the child, then drip in his ear the white of an egg with the milk of a woman and earthworms [?] and oil of roses.

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١٥٠ **C**: وقال

١٥١ **D**: ويقطر

## Commentary

In this fragment Paul gives a short recipe against ear inflammation.

L. ٣ خراطين] What exactly does خراطين mean in this context? We probably have to take it as *ḫarāṭimu*, the broken plural of *ḫurṭūm* or *ḫurṭum*, meaning *proboscis*, *nose*, *juice of none trodden grapes*, or perhaps *earth worms*, none of which makes terribly good sense. دُهْن وَرْد] *Duhn ward* (*oil of roses*) is Greek *ῥόδινον*.

The attribution of this fragment to Paul of Aegina is not entirely certain since some of the manuscripts read Rufus (روفوس) instead of Paul (بولس), a confusion which is not uncommon. Yet since Paul often uses Aetius as a source in his *Therapy*, and since we find approximately the same treatment in this author under the heading *Πρὸς φλεγμονὰς ὤτων* (VI 81 [II p. 226,17-9 Olivieri]: *εἰ δὲ σφοδροτέρα εἴη ἡ φλεγμονή, παρηγορεῖ μὲν τὰς ὀδύνας τὸ λεπτὸν καὶ λευκὸν τοῦ ὠοῦ μετὰ γάλακτος γυναικείου κτλ.*; mention is also made of *ῥόδινον* later in the chapter), I am inclined to think that this fragment is by Paul. He himself recommends a treatment similar to that of Aetius in III 23.1 (I p. 188,23-4 Heiberg), also in the context of inflammation. Thus this fragment deals with the ear inflammations (*φλεγμονή*) rather then swellings in general, although the vagueness of the term *waram* (*'* ad **F 3٤**) makes it difficult to know exactly what is meant.

## F 9 Siriasis (Heat Stroke)

Baladī *Ḥab.* III 5 (p. 232,10 ff.):

الباب الخامس في الورم العارض لدماغ الطفل ومداواته.

قال فولس في كتابه : قد يعرض للصبي في دماغه ورم يقال له سرياسيس[١٥٤] وهو وَرَمٌ حارٌّ يعرض في المواضع التي تقرب من الدماغ في الغشاء[١٥٥] الذي يغشيه ويتبع هذا الورم أن يغور اليافوخ والعينان تغوران ويصفرّ لون البدن ويجفّ

٥ والذي ينفع من ذلك أن يؤخذ مُحُّ[١٥٦] البيض ويخلط مع دهن ورد وتُبَلّ به خرقة ويصير على اليافوخ ويبدل تبديلا[١٥٧] دائما *

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[١٥٤] **A**: سرناس.

[١٥٥] **C**. **D**: الغشي.

صفة[١٥٨] دواء آخر يصير على اليافوخ وهو نافع من هذا الوجع تؤخذ[١٥٩] الحشيشة التي يقال لها سقورفيروس[١٦٠] وقشر[١٦١] القرع والغشاء الذي على البطيخ فيجمع ويصير على اليافوخ ويصير عليه عنب الثعلب مع دهن *

١٠ وقال في كتابه في تدبير الأطفال وتربيتهم

انه يصيب الصبي ورم في ناحية الدماغ وحجبه فيعرض له فيه غَرَزانُ الهامة والعينين مع حمّى وصفرة اللون ويبس البدن

فينفع من ذلك محّ البيض ودهن اللوز وإذا[١٦٢] وضع على الهامة دهن الورد[١٦٣] وبقلة الحمقاء مع ورق كزبرة وان يغرق البدن كله بماء الكزبرة مع دهن

١٥ الورد[١٦٤] *

Translation

Chapter five: On the swelling that strikes the brain of the child , and its treatment.

Paul said in his book:

Sometimes the brain of the child is striken by a swelling, that is called *siriyāsīs* (*cειρίαcιc*), i.e. a warm swelling [i.e. an inflammation] that affects the area of the brain that is alongside the membrane covering it [the brain].

An accompanying symptom of this swelling is that the parietal bone and the eyes sink in, and that the the colour of the body becomes yellow, and that it dries out.

For this, it is good to take egg yolk, mix it with attar of roses, and then spread it on a bandage, and put it on the parietal bone, changing it constantly.

The description of another remedy which, when put onto the parietal bone, is good for this ailment: Take the plant which is called *sqūrfiyūrūs* (*cκορπίουροc*), the peel of cucumber, and the skin that is on a melon, mix everything together, put it on the parting, and put on top of it black nightshade with *duhn* [of roses].

He said in his book on the hygiene and therapy of children:

A child is striken by a swelling in the region of the brain and its membranes, so that he has a pricking pain in the head and eyes, accompanied by fever and a yellow colouring and dryness of the body.

In that case, the following are useful: egg yolk, oil of almonds, and — [especially] when put on the top of the head — *duhn* of roses, purslane with leaves of coriander, and [it is useful] to immerse the whole body in water of coriander with oil of roses.

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[١٥٨] **C**: صفة اخر.

[١٥٩] **C**: يؤخذ.

## Commentary

In his chapter III 5, al-Baladī included the whole chapter I 13 (*Περὶ cειριάcεως*) and possibly the whole chapter on the subject from the *Therapy*. Since this allows us to make some points about the language and the style of the two Pauline works in their Arabic dress, I have decided to cite the whole of Baladī *Ḥabālā* III 5. First comes the description of the disease (l. ٢-٤) followed by two recipes (l. ٥-٦ and ٦-٩) from the *πραγματεία*, and then the description (l. ١١-١٢) and the treatment (l. ١٣-١٥) from the *Therapy*.

L. ٨ f. الحَشِيشَة التي يُقَالُ لَها سقورفيروس] Gr. *cκορπίουροc*, i.e. *ἡλιοτρόπιον τὸ μέγα* (*Heliotropium vilosum*) cf. Dsc. IV 190.

L. ٩ قَرْع] (aram. ܩܪܥ, pronounced **ܩܪܥ** in Western Syriac, cf. Nöldeke ap. Löw *Pflanzennamen* nr. 297) *pumpkin,* gr. *κολόκυνθα*. For the different possibilities of identification cf. Dietrich *Diosc. Triumph.* II 116.

L. ٩ f. عنب الثعلب] *Black nightshade*, *solanum nigrum*, gr. *cτρύχνοc κηπαῖοc*; cf. Dietrich *Diosc. Triumph.* IV 63.

L. ١١ غَرَزانُ الهامة والعينين] "A pricking pain in the head and in the eyes". Cf. for this rare n.a. I Ullmann *Schlangenbuch* § 95.

L. ١٤ بَقْلَة الحُمْقَاء] *Purslane, Portulaca oleracea*, *ἀνδράχνη*; cf. Ullmann *Nomen Generis* p. 28 und Dietrich *Diosc. Triumph.* II 106. الكزبرة] *kuzba/ura* is a secondary form for *kusba/ura* and means *coriander, Coriandrum sativum*, gr. *κοριαννόν* (= *κόριον*); cf. WKAS I 166 b 4 ff. and Dietrich *Diosc. Triumph.* III 60.

Soranus in his *Gynaecia* (II 55 [p. 91, 20 ff. Ilberg]) has a chapter *Περὶ cειριάcεως*, which is the basis for the treatment of this subject for the later encyclopaedist like Oribasius (*Synops.* V 13 [p. 157,25 Raeder], VIII 21 [p. 256, 23 ff. Raeder]) whom Paul uses in his *πραγματεία* (I 13) and Aetius (IV 13 [I p. 365,28 ff. Olivieri]). It is rewarding to compare the *πραγματεία* to the *Therapy*: *Cειρίαcιc* is defined in the former as وَرَمٌ حارٌّ يَعْرِضُ في المواضِعِ التي تَقْرِبُ مِنَ الدِّماغِ في الْغِشَاءِ الذي يَغْشِيهِ *a warm swelling [i.e. an inflammation] that affects the area of the brain that is alongside the membrane covering it [the brain]* (gr. *Cειρίαcίc ἐcτι φλεγμονὴ τῶν περὶ τὸν ἐγκέφαλον καὶ μήνιγγαc μερῶν*). Yet the latter has وَرَمٌ في ناحيةِ الدِّماغِ وَحُجُبِهِ *a swelling in the region of the brain and its membranes.* More or less the same idea is expressed, but the formulation is quite different. My translation *membrane* hides the fact that two, although synonymous yet completely different roots are use to convey the idea of covering the brain, once √ḤĞB and once √ĠŠY. The list of symptoms is quite different in formulation and also in content: وَيَتْبَعُ هذا الْوَرَمَ أَنْ يَغُورَ الْيافُوخُ وَالْعَيْنَانِ تَغُورَانِ وَيَصْفَرُّ لَوْنُ الْبَدَنِ وَيَجِفُّ *An accompanying symptom of this swelling is that the parietal bone and the eyes sink in, and that the the colour of the body becomes yellow, and that it dries out* versus فَيَعْرِضُ لَهُ فِيهِ غَرَزانُ الْهَامَةِ وَالْعَيْنَيْنِ مَعَ حُمّى وَصُفْرَةِ اللَّوْنِ وَيُبْسِ الْبَدَنِ *he has a pricking pain in the head and eyes, accompanied by fever and a yellow colouring and dryness of the body.* I suspect that something went wrong in the textual tradition with غَرَزان *pricking pain* and we have to read perhaps (an

the content is the same, but the form is quite different. As to the medication, the beginning is is similar (*egg yolk*, *oil of roses*), but then, they have different recipes. It is remarkable that at least one of the remedies that Paul recommends in the *Therapy* is only found in Aetius and not the other encyclopaedias mentioned above, namely the passage Aetius IV 13: *ἐμβρεχέσθωσαν οὖν κορίου χυλῷ μετὰ ῥοδίνου* corresponding to l. ١٤: وأَنْ يَغْرَقَ الْبَدَنُ كُلُّهُ بِماءِ الْكُزْبُرَةِ مَعَ دُهْنِ الْوَرْدِ *and [it is useful] to immerse the whole body in water of coriander with oil of roses.*).

## F 10 Fear

Baladī *Ḥab.* III 8 (p. 236 ult.-237,2)

ذكر ما قال فولس في ذلك [في التفزع الذي يعرض للصبيان والاطفال ومداواته]

قال فولس : اذا عرض للصبي الفزعُ[١٦٥] فخذ جوف القصب فاطله على هامته وقدميه وغَطِّه[١٦٦] بالثياب فانه يسكن عنه *

Translation

The account of what Paul said about this [sc. the anxiety that befalls infants and children, and its treatment]. Paul said:

If fear befalls the child, then take the interior of reeds, and apply it to the top of its head and its feet, and cover him with clothes, and then it will cease.

## Commentary

A short fragment giving some general advice in case that the child is beset by fear.

L. ٢ قَصَب] denotes different sorts of reeds, cf. Dietrich *Diosc. Triumph.* I 54.

The chapter III 8 in al-Baladī deals with fear (*tafazzu*ʿ) and he says that Hippocrates and also Galen have treated this subject (p. 235, paen. ff): ان ابقراط ذكر التفزع في الامراض التي تعرض للاطفال والصبيان فيما بين ولادتهم ونبات اسنانهم وقال جالينوس وذلك يعرض لهم في النوم الخ *Hippocrates mentioned the fear among the ailments which befall infants and children between birth and dentition*[167]*. Galen said: This befalls them during their sleep etc*[168]*.* Paul himself has no separate chapter *On Fear* in his *πραγματεία.*

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١٦٢ **C**: فإذا.

١٦٣ **C**, **D**: اللوز.

١٦٤ **A**, **B**: om. مع دهن الورد.

## F 11 Sneeze (?)

Baladī *Ḥab.* III 40 (p. 295, 8-10)

ذكر ما قاله فولس في ذلك [في العطش العارض للصبيان ومداواته]

وقال فولس[169] في كتابه في تدبير الاطفال : اذا اصاب الصبي عطش متواتر[170] فاسحق خرْءَ كَلْبٍ يابسا وادنه[171] من منخري الطفل يشمه وألْقِهِ من[172] منخريه فانه يسكن عنه *

Translation

The account of what Paul said about this [about the thirst which befalls the children, and its treatment].

Paul said in his book *On the Therapy of Infants*: If continuous thirst befalls the child, then pulverize the feces of a dog, dried, and bring them near the nostrils of the child, so that he smells them, and then take them away from his nostrils. Then it will stop.

### Commentary

A recipe against thirst or more likely sneezing.

L. ٢ عطش] *ʿaṭaš* clearly means *thirst*, but because of the treatment, I suspect that we have to read عَطْسٌ or عُطَاسٌ (*sneeze*). *Vid. infra.*

Al-Baladī clearly discusses thirst in III 40, but he might have confused عُطَاسٌ (*sneezing*) with عَطَش (*thirst*). There clearly was a chapter on sneezing in Paul's *Therapy* as we can see from al-Baladī III 1 (’ **F 2** ١١). Paul discusses sneezing in II 48 (*Περὶ πταρμοῦ* I. p. 118,22 ff. Heiberg), and the recipe in this fragment might possibly be a concretion of the provisions he gives at the end of the chapter (I p. 119,5 ff. ... *ἐπιτηδευέσθω ... συνεχὴς τῶν δριμυτέρων ὀσμῶν πεῖρα κτλ.*).

[167] Hipp. *Aph.* III 24 (IV 497 Littré).

[168] Cf. the Galens commentary (XVII B 747 f. Kühn) to Hipp. *Aph.* IV 67 (IV p. 526 Littré) "*Ἐν τοῖσι πυρετοῖσιν οἱ ἐκ τῶν ὕπτιοι κεφάλου ἢ στόματος ἱδρῶτες*"

**F 12** **Diarrhoea**

Baladī *Ḥab.* III 47 (p. 309,7-14)

ذكر ما قال[173] فولس[174] فى ذلك [في الاختلاف العارض للصبيان وعلاجه]

قال[175] فولس[176] اذا سَالت فضلة الى بطن الصبي فامنعه من الاستحمام وضع على معدته صوفة مبلولة بمطبوخ عتيق طيّب الرائحة ودهن السفرجل او[177] ماء السفرجل

فان[178] زادت[179] العلة فخذ أطراف الكرم وقاقيا[180] ومصطكى من كل واحد جزء وألْقِ عليه[181] من صفرة البيض حتى يصير طِلاءً ثم[182] اطل به على المعدة وبين الكتفين وضع عليها صوفا وارجوانا واربطه فانه يعقل بطنه بِلاَ أذًى

واطعم الداية ما يحبس البطن

فان كان الصبي يختلف شيئا رقيقا ابيض منتن الرائحة فاسحق هذه الادوية مع مطبوخ عتيق اسود وشدها على البطن واطعم الصبيَ والدايةَ الجَاوَرْسَ

Translation

The account of what Paul said about this [about the diarrhoea that befalls children and its treatment].

Paul said: If a superfluity flows into the stomach of the child [i.e. if it suffers from diarrhoea], then prevent him from bathing, and put onto his stomach a piece of wool that has been dripped in sweet-scented, old, cooked wine, and balm of quinces, or extract of quinces.

If the ailment increases, then take the tips of vine, acacia, mastic, of each one part, and put upon it egg yolk until it becomes an embrocation. Then apply it on the stomach of the child,

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[173] **C**: قاله

[174] **D**: روفس

[175] **C**: وقال

[176] **B** add.: اذا ذكرت

[177] **D**: و

[178] **D**: فاذا

[179] **C**: رادة

[180] **C**: واقاقيا

and between the shoulders. Put upon it wool, and Judas-tree, and tie it fast, since his belly can be bound without harm.

Feed the wet-nurse with what constipates the stomach.

If the child excretes something soft, white, of putrid smell, then pulverize these remedies with black, old cooked [wine], an bind them onto the belly. Let the child and the wet-nurse eat millet.

## Commentary

Here Paul deals with diarrhoea, already mentioned in the context of dentition(’ **F 2** ٨, **F 3** ٦ ff, ١٥ ff). He first gives some general provisions (l. ٢-٤), and then more specific ones in case that the ailment becomes too serious (l. ٥-٨). Finally he gives advice for the case that “the child excretes something soft, white, of putrid smell”.

L. ١ اختلاف] The meaning of the word *iḫtilāf* with which al-Baladī deals in chapter III 47 is not completely clear. Dagorn *Al-Baladī* p. 110 discusses the problem and takes it to mean *coliques*. Al-Baladī opens the chapter with a reference to Hippocrates (Muḥ. p. 308,-3 f.): ان ابقراط ذكر الاختلاف في الامراض التي تعرض للاطفال عند قربهم من نبات الاسنان *Hippocrates mentioned the iḫtilāf among the ailments that befall children when close [to the age] of dentition.* Al-Baladī surely thinks of *Aphorisms* III 25 (IV 496, ult. ff. Littré: *Πρὸς δὲ τὸ ὀδοντοφυέειν προσάγουσιν, οὔλων ὀδαξησμοὶ πυρετοὶ σπασμοὶ διάρροιαι*) so that *iḫtilāf* probably means *diarrhoea*.

L. ٣-٤ سَفَرْجَل] *Quince, Cydonia oblonga,* gr. *κυδώνια μῆλα*; cf. Dietrich *Diosc. Triumph.* I 87. *Mā’ as-safarğal* corresponds to gr. *τὸ μήλινον* [sc. *ὕδωρ*].

L. ٥ الكرم] *Vine*, *Vitis vinifera*, *ἄμπελος οἰνοφόρος*, cf. WKAS I 140 a 38 ff. & I 561 b 40 ff. and Dietrich *Diosc. Triumph.* I 47 n. 9 قاقيا] *Al-(a)qāqiyā* denotes *acacia* (*ἀκακία*). For the different forms cf. Dietrich *Diosc. Triumph.* I 70. شَجَرَة المَصْطَكَى] *Mastic tree*, *Pistacia Lentiscus*, gr. *σχῖνος*; the oil of which is called in Greek *σχίνινον*. Cf. Bar Bahlūl (Rabban) col. 1350,-8: الشجرة التى تكون من عرقها المصطكى **وهما** (cf. Löw *Pflanzennamen* nr. 41 d). A Greek synonym is *μαστίχη*, on which the Arabic مَصْطَكَى is based. Cf. Dietrich *IB Tafsīr* I 66.

L. ٧ أَرْجُوَان] from Persian ارغوان *Judas-tree*, *Cercis siliquastrum* (cf. Noeldeke *WB* p. 17 a and Siggel *WB* s.v.).

Paul of Aegina discusses diarrhoea in his *πραγματεία* III 39 (I p. 228,17 ff. Heiberg) where he refers (*ibid.* l. 27 ff.) the reader to II 44 (*Περὶ τῆς περὶ τὸν στόμαχον ἐπιμελείας* I p. 115, 17 ff. Heiberg). At the beginning of this latter chapter he recommends approximately the same medication.

## F 13 Constipation

Baladī *Ḥab.* III 48 (p. 310,1-3)

ذكر ما قال[١٨٣] فولس في ذلك [ فيما يعرض للاطفال من الحصر والاعتقال وعلاج ذلك]

قال[١٨٤] فولس : اذا حصر الصبي فعالجه بشياف من اسفل واحقنه بماء العسل واسحق فُقَّاح الا[١٨٥] واطل حوالي سُرَّته فان بطنَه يستطلق فان لم يلين بطنه[١٨٦] بهذا فاسقِه من عِلْك[١٨٧] الانباط قدر حِمِّصة *

Translation

The account of what Paul said about this [about the constipations that befall children and their treatment]. Paul said:

If the child suffers from constipation, treat him with a suppository, and clyster him with honey water, and pulverize the flowers of sweet rush [?], and apply them onto the area around the navel, than he will have open bowels. If his stomanch is not relaxed by this, let him drink of the mastic of the Nabatians the quantity of one chickpea.

### Commentary

Paul deals in the fragment with constipation and recommends a number of treatments.

L. ٢ شيَاف مِنْ أَسْفَلَ] *Šiyāf from beneath* means simply *suppository*, the specification *from beneath* being only added for the sake of clarity in order to distinguish it from the meaning *collyrium* (cf. **F 3** ١٧)

L. ٣ فُقَّاح الإِذْخِر] *Al-iḏḫir* is *Sweet rush*, *Cymbopogon schoenanthus*, gr. *σχοῖνος*; vgl. Dietrich *Diosc. Triumph.* I 14. *Fuqqāḥ al-iḏḫir* seems to be the name of a perfume or medicine, cf. Lane s.v. *fuqqāḥ* (2424).

In his chapter *Περὶ κωλικῆς διαθέσεως* (III 43 [I p. 235, 24 ff Heiberg]) Paul lists honey suppositories (*βαλανιστέον αὐτοὺς διὰ μέλιτος ibid.* p. 237, 4 f.) as one of the treatments in case of constipation, as he does here in this fragment.

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[١٨٣] **C**: قاله

[١٨٤] **C**: وقال

[١٨٥] والسلنحاسف؟؟ : ad. **C**, **D** post الاذخر

## F 14 Dermatological Disorders

Baladī *Ḥab.* III 52 (p. 314,-4 - 315,13)

ذكر ما حكاه فولس عن روفس في مداواته [الخنازير والخُراجات والقروح الرطبة والبثر]
وقد ذكر فولس في كتابه شيئا حكاه عن روفس ما هذا لفظه

قال روفس قد أخبرتُك آنفا ان الطفل اذا غُذي[188] بغذاء رديء اعْتَرَتْه اسقام مختلفة منها الخراجات والبثور[189] والقروح الرطبة في ظاهر البدن والاورام التي تسمى الطاعُون[190] فينبغي[191] عند ذلك ان يعالَج بالملح وشبهه لمكان حدته ثم تحمهم بماء قد طُبخ فيه ورد وعَدَس *

وان[192] احْتَجْتَ الى ما هو أشدُّ قبضا من ذلك فاستعمل ماء قد طُبخ فيه آس وقشور رمّان فان كان به قروح رديئة فضَمِّدْها بماء الهندباء ولسان الحمل مع شيء من خبز او سويق او بلقة الحمقاء والبلح بماء[193] الورد اليابس المطبوخ مع إكليل الملك وقُسط[194] واسحق مرداسنج وشب بخل او بدهن الآس وبدهن الورد[195] واطْلِه عليها *

صفة[196] طلاء للقروح والطواعين تأخذ خَبَث الرصاص ونشاستج اجزاء[197] سواء فاسحقها وعنب الثعلب ودهن الورد واطل به القروح صفة طلاء آخر تأخذ مرداسنج واسفيداج الرصاص من كل واحد جزءا سواء واخلطهما مع طحلب واطله على القروح *

صفة[198] طلاء آخر اسحق خَبَث الحديد مع مطبوخ[199] جديد او عتيق واطل به القروح

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188 **D**: اغذي
189 **A, C, D**: والبتر
190 **A, B, C**[2]: طاعون. **C**[1], **D**: طواعين
191 om. **D**
192 **A**: فان
193 **C**: ماء
194 **A**: قط
195 **A, C, D**: ورد
196 om. **C**
197 om. **C**

طلاء آخر[٢٠٠] وهو نافع للخراجات والبثر العارض للاطفال الصغارتأخذ
قليميا[٢٠١] مغسولة ونحاسا محرقا واقاقيا وزعفران من كل واحد مثقال ومن
٢٠ الكثير المجبول[٢٠٢] بالماء ومن الهندباء ما تسحق به الادوية ناعما بماء الهندباء
وماء[٢٠٣] عنب الثعلب ودهن ورد واطل بها *

Translation

The account of what Paul told in reference to Rufus about its treatment [sc. of the scrofula, abscesses, wet ulcers, and pustules]. Paul mentioned in his book something that Rufus told. This is a literal quote: Rufus said: I have informed you in the beginning that the child when fed with bad food gets different ailments, among which are the skin rashes, the pustules, and the weeping ulcers on the surface of the body, and the swellings that are called bubos [*ṭā'ūn*]. In that case it is necessary to treat it with salt and the like because of its sharpness. Then wash them with water in which roses and lentils have been cooked before.

If you need something more styptic than this, use water in which myrtle and pomegranate peels have been cooked before. If in addition he has purulent ulcers, then apply a dressing to them made with water of endive, and plantain with some bread, or mush, or purslane, or dates with water of dried roses cooked with melilot, and costus root [Saussurea lapta]. Pulverize silver ore and alum in vinegar or oil of myrtle and oil of roses, and apply it upon them.

Recipe of an embrocation against ulcers and bubos: take lead dross and starch, equal parts, and pulverize them. [Take] black nightshade and oil of roses, and apply it upon the ulcers.

Recipe of another embrocation: take lead dross and ceruse, of each one equal part, and mix them with duckweed, and apply them upon the ulcers.

Recipe of another embrocation: Pulverize iron dross with new or old cooked [wine], and apply it upon the ulcers.

Another embrocation which is useful against the skin rashes, and pustules which befall small children: take washed cadmia, burnt copper, acacia, and saffron, of each one *miṯqāl*, and [take] from a large quantity [of the mixture] kneaded with water and from endive, the remedy is pulverized into a very powdery state [mixing it] with extract of endive and extract of black nightshade and oil of roses. Apply [it] upon them.

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٢٠٠ **A**: om. طلاء آخر

٢٠١ **C**: اقليميا. **D**: قلما

## Commentary

This chapter is most interesting, since Paul in his *Therapy of the Children* quotes from Rufus' *Therapy of the Children*. Rufus first (l. ٣-٥) states that there are a number of diseases caused by bad food, referring the reader back to a part of his treatise (' **F (R) 10**) that is preserved both in Baladī *Ḥabālā* III 1 (' **F (R) 10 b** ) and III 51 (' **F (R) 10 a** ). He gives general guidance in l. ٤-٦, and then stronger recipes in l. ٧-١١, ١٢-١٥, ١٦-١٧, and ١٨-٢١.

L. ٦ عَدَس] *Lentil, Lens culinaris,* gr. *φακός*; cf. Dietrich *Diosc. Triumph.* II 91.

L. ٧ آس] *Myrtle*, *Myrtus communis*, *μυρσίνη*; cf. Dietrich *Diosc. Triumph.* I 83.

L. ٨ الرُمَّان] *Rummān* means *pomgranate, the fruit of Punica granatum,* gr. *ῥοιά/ ῥόα*; قُشور الرُمَّان seems to be the translation of *σίδια pomgranate peels* as it is in Baladī *Ḥabālā* III 45 (p. 305,7) corresponding to PAeg. IV 57.7 (I p. 384, 26 Heiberg); cf. PAeg. VII 3 s.v. *ῥοιά* (II p. 256,25): *τούτων* [sc. *τῶν ῥοιῶν*] *δὲ ἔτι μᾶλλον τὰ λέμματα τὰ σίδια προσαγορευόμενα* and Dietrich *Diosc. Triumph.* I 81. هِنْدِباء] *Endive, Cichorium endivia,* gr. *σέρις*; cf. Dietrich *Diosc. Triumph.* II 114. لِسَان الحَمَل] literaly *lamb tongue*, gr. *ἀρνόγλωσσον*, means *plantain, Plantago*; cf. Dietrich *Diosc. Triumph.* II 108.

L. ١٠ إكْلِيل المَلِك] > syr. ܟܠܝܠ ܕܡܠܟܐ, *Melilot*, *Melilotus officinalis*, gr. *μελίλωτος*; cf. Dietrich *Diosc. Triumph.* III 40 and WKAS I 300 a 40 ff. مُرْدَاسَنْج] is used for *λιθάργυρος* (*litharge, Pb.O*; vgl. Berendes *Paulos* p. 677).

L. ١٢ خَبَث الرَّصاص] *Ḫabaṯ ar-raṣāṣ* (*lead dross*) corresponds to gr. *μολύβδαινα*, although Bar Bahlūl (Löw *Pauloszitate* nr. 105 /ed. Duval col. 1031,9 f.) quoting Paul equals it with *ḫabaṯ al-fiḍḍa* (*silver dross)*: خَبَث الفضّة ܚܒܬ ܕܟܣܦܐ ܗܘ ܕܡܬܩܪܐ ܐܦ ܟܠܟܘܣ. See also Bar Bahlūl (Löw *Pauloszitate* nr. 93/ed. Duval col. 636,23 f.) quoting Paul again: ذكر جبريل عن فولوس ان اسم خبث الفضّة ܐܟܠܟܘܣ بالیونانیة هلقوسما. نشاستج] *Starch* (cf. Dozy *Suppl.* II 669 b who translates *amidon*, and Payne Smith col. 1878 نشاستج الحنطة ܚܛܐ ܢܫܫܬܐ), corresponding to gr. *ἄμυλον*.

L. ١٣ عِنَب الثَّعْلَب] *Black nightshade*, *solanum nigrum*, gr. *στρύχνος κηπαῖος*; cf. Dietrich *Diosc. Triumph.* IV 63.

L. ١٤ إسْفِيذَاج الرَّصاص] *Ceruse*, *ψιμύθιον*, cf. Nöldeke *WB* s.v. طُلْحُب] *Duckweed, Lemna minor*, gr. *φακὸς (ἐπὶ τῶν τελμάτων)*; vgl. Dietrich *Diosc. Triumph.* IV 78.

L. ١٩ قليميا] < syr. ܩܕܡܝܐ = ܩܡܝܐ (vgl. Brock. *Lex. Syr.* 668 b) < gr. *καδμεία*, *cadmia*, cf. Schmucker *Met. Med.* nr. 62.

Paul deals with different dermatological disorders in III 3 of his *πραγματεία*, and some of the recipes there can already be found in his predecessors (cf. Aetius VI 64 and VI 66). Although most of the ingredients mentioned in this fragment occur in one place or another, there is no exact match for the recipes. Cf. the next two fragments (**F 15**, **F 16**) for a more specific discussion of some of the names of these skin diseases.

## F 15 Cradle-Cap

Baladī *Ḥab.* III 2 (230,3-10)

وذكر ما قاله فولس في ذلك [في القروح التي تعرض في رؤوس الصبيان وتعرف بالسعفة وعلاج ذلك]

قال[٢٠٤] فولس في كتابه في تدبير الاطفال وعلاجهم تأخذ[٢٠٥] مرداسنج [٢٠٦] وإسفيذاج[٢٠٧] الرصاص من كل واحد جزء يسحق بمطبوخ عتيق ويطلى به الرأس *

٥ آخر وقال خذ أقاقيا ولادَن واعجنهما بماءالتين[٢٠٨] ويُقَرَّصُ ويسحق عند الحاجة بماء التين[٢٠٩] ويطلى *

آخر قال واسحق[٢١٠] ايضا الجُلَّنار وذرّه عليه[٢١١] *

Translation

The account of what Paul said about this [sc. the ulcers which befall the heads of children and are known as *cradle-cap* (*as-sa'afa*)].

Paul said in his book *On the Therapy and Treatment of Infants*: Take litharge and ceruse, each one part, pulverised with old cooked [wine] and apply on the head.

Another [recipe]. He said: Take acacia and ladanum and mix them with fig water. Then they are formed into pills, and if necessary pulverised with fig water and rubbed on.

Another [recipe]. He said. Pulverize also pomegranate blossoms and strew it upon it.He said in the third book of his *kunnāš* etc. (follows PAeg III 3.5 [I p. 136,14-17]).

### Commentary

Al-Baladī quotes three recipes from Paul's *Therapy* in his chapter on cradle cap.

L. ٥ لادَن] *Ladanum, λάδανον*, i.e. a gum resin from plants of the genus *Cistus*; cf. Dietrich *Diosc. Triumph.*

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٢٠٤ **A**, **C**: وقال

٢٠٥ **C**: يـ

٢٠٦ **A**: مردشانج

٢٠٧ **A**, **D**: اسفيداج

٢٠٨ **A**: السب

٢٠٩ **A**: الطين

I 66.

This is a chapter where both the *Therapy* and the *πραγματεία* are quoted. The subject is the *qurūḥ as-sa'fīya*, literally *palm ulcers*. There is a chapter in Paul's *πραγματεία* entitled *Περὶ σύκων* (III 3.6 [I p. 136,18 ff.]) that starts: *Σῦκα ὀνομάζουσι βλαστήματα ἑλκώδη, στρογγύλα, ὑπόσκληρα, ἐνερευθῆ, οἷς ἀκολουθεῖ καὶ ὀδύνη· φύεται δὲ ταῦτα τὸ μὲν πλεῖστον ἐν κεφαλῇ, κτλ*. Yet the recipe from the *πραγματεία* is found there under the heading *Πρὸς ἀχῶρας τοὺς ἰχωρροοῦντας*. The recipe l. ٤-٥ has its closest correspondance in the section III 3.2 *Πρὸς ψυδράκια καὶ ἐξανθήματα τῆς κεφαλῆς*, e.g. I p. 135, 7 f. & 12 f. Al-Baladī or his predecessors have possibly confused the different recipes assigned to each specific dermatological condition. The situation is even complicated by the fact that Bar Bahlūl (Löw *Pauloszitate* nr. 67/ed. Duval col. 1022,-4 - paen) says that *μελικηρίδες* are a subgroup of *weeping sa'afa*:
❖ يكون هذا جنس من السعفة الرطبة. See also the next fragment (**F 16**).

## F 16 Honeylike Ulcers

Baladī *Ḥab.* III 3 (p. 231,3-5)
ذكر ما قاله فولس في ذلك [في القروح التي تعرض في رؤوس الصبيان وتسمّى العسلية والشهدية وعلاجهما]
قال فولس يؤخذ مرداسنج احمر وحبّ الغار أجزاء سواء تسحق بخل ويطلى به الراس مرات كثيرة ❋

BH III 3 Translation
The account of what Paul said about this [sc. the ulcers that befall the heads of children and are named honeylike [*'asalī*] and honeylike [*šahdī*], and their treatment].
Paul said. Take silver ore and laurel seeds, equal parts, and pulverize them in vinegar. Apply this to the head many times.

## Commentary

Honeylike ulcers (*μελικηρίδες*) are described in PAeg. IV 34 (treatment with drugs) and VI 35 (surgery). In both chapters this recipe is not mentioned, and it is thus likely that it comes from the *Therapy*. Cf. also III 3.4 (I p. 135,22 -24): *ὅμοιον δὲ αὐτῷ* [sc. *τῷ ἀχῶρι*] *πάθος κατὰ τὴν ἰδέαν ἐστίν, ὃ καλοῦσι κηρίον, ἐπειδὴ τὰς κατατρήσεις ἔχει μείζονας ὑγρότητος μελιτώδους περιεκτικὰς παραπλησίως τοῖς τῶν μελιττῶν κηρίοις*. Cf. the identification of الورم الشهدي with *μελικηρίδες* in Bar Bahlūl (' ad **F 15**).

## F 17 Abrasion at the thighs

Baladī *Ḥab.* III 55 (p.319,6 f.)

الباب الخامث و الخمسون في ذكر ما يعرض في فَخِذَي الصبي من السحج والرطوبة وعلاج ذلك

وقال فولس يذرّ على الفَخِذَيْن آس يابس وحِنّاء وورد يابس وإن شِئْتَ فاجعل ذلك مع دهن ورد *

Translation

The 55th chapter on the account of the abrasion and the moisture that occur at the thighs of the child, and their treatment. Paul said: Strew dry alum, henna and dry roses on the thighs. If you like, make this with oil of roses.

### Commentary

A short recipe against abrasion at the thighs.

L. ٢ حِنّاء] *Henna*, *Lawsonia inermis*, gr. *κύπρος*; cf. Dietrich *Diosc. Triumph.* I 64.

The recipe given corresponds to PAeg. I 11[212] (I p. 12,28-30; *Πρὸς τὰ τῶν μηρῶν παρατρίμματα.*): *Τὰ δὲ κατὰ τοὺς μηροὺς παρατρίμματα μυρσίνῃ ξηρᾷ διαπάσσειν καὶ κυπέρῳ καὶ ῥόδοις*. Al-Mağūsī has a very similar recipe[213]: واذا عرض للطفل سحج في فخذَيْه فينبغي ان ينثر عليه الآس والورد المدقوقَيْن بعد ان يعالى بدهن ورد او يطلى بمرداسنج ودهن ورد *If intertrigo befalls the infant at his thighs, then it is necessary to strew upon it pulverised myrtle and roses, after having put onto it oil of roses, or after having rubbed it with litharge and oil of roses.*

## F 18 Excessive hair growth

Baladī *Ḥab.* III 56 (p. 319,-8-ult.)

الباب السادس والخمسون في كثرة خروج شَعر الصبي وعلاجه

هذا الباب وجدْتُه فيما وصفه فولس في تدبير الاطفال وتربيتهم وليس[٢١٤] هذا من الاشياء

[212]Cf. his sources Oribasius *Synops.* V 11 and Aetius IV 24.

[213]II 56,11 ff., Cf. E. Kahle .*Al-Mağūsī (Haly Abbas) über Kinderkrankheiten im Kāmil aṣ-ṣinā'a aṭ-ṭibbīya*, Erlangen 1980, *ad*

التي ينبغي ان تُعَدَّ في اعداد[٢١٥] الامراض اذ[٢١٦] كان لا يضرنا بالافعال الاّ أني لمّا رايتُ فولس قد ذكره وجعله بابا مُفْرَدا اتبعتُ اثره في ذلك ولم احبِّ ان اخلِّيَ الكتابَ من ذكره ٥ وهذا قوله بلفظه

قال فولس كثرة البخار الغليظ من فضلة تجتمع تحت الجلد فانه يعرض من ذلك نبات شَعر كثير فاحرق زوفا يابسة واسحقها وادلُك بها الموضع الذي فيه الشَعر او فاطبخ الرازيانج بالماء وحم به الصبي وادلك راسه برماد تين يابس مع دقيق باقِلَّى *

Translation

The fifty sixth chapter on excessive hair growth of children, and its treatment.

I have found this chapter among what Paul has described in his *On the Therapy and Upbringing of Infants*. This is not something that should be counted among the diseases, since it does not harm us with its effects. But since I saw that Paul had mentioned it, and had a separate chapter on this subject, I followed his lead in this matter, and did not want to let this book be lacking a discussion of it. This is a literal quote. Paul said:

The great amount of thick vapor is due to a superfluity that accumulates under the skin. It causes excessive hair growth. Burn dry hyssop, pulverize it, and rub with it the place in which the hair is. Or cook fennel in water, and bath the child in it, and rub his head with dry ashes of fig along wiht flour of broad beans.

## Commentary

In the beginning of the chapter on excessive hair growth, al-Baladī states that although this is not a disease, he still wants to include it, since Paul did so in his *Therapy* (l. ٢-٥). Paul gives first the aetiology for this phenomenon (l. ٦ f.) and then says how to treat it (٧-٩).

L. ٧ زُوفَا] > syr. ܙܘܦܐ (cf. Brock. *Lex. Syr.* 193 b; cf. hebr. אֵזוֹב, akkadian *zūpu* [Soden *AHw* 1538 b]) *hyssop, Hyssopus officinalis,* gr. *ὕσσωπον*; cf. Dietrich *Diosc. Triumph.* III 27.

L. ٨ رَازِيَانَج] pers., *fennel, Foeniculum vulgare*, gr. *μάραθον*; cf. Dietrich *Diosc. Triumph.* III 66.

L. ٩ بَاقِلَّى] *Bean, Vicia faba,* gr. *κύαμος*; vgl. Dietrich *Diosc. Triumph.* II 89.

Loss of hair and baldness are the prime concerns for adult men as far as their capillary well-being is concerned. For children, this seems to be different, so Paul has a chapter on excessive hair growth in his *Therapy*. He deals

with all sorts of other problems regarding the hair and its appearance in his *πραγματεία* III 1 (e.g. *ἀλωπεκία*, *ὀφρίαcιc*, *φαλάκρωcιc* etc.) as does Aetius VI 55 ff., but they do not discuss excessve hair growth.

## F 19 Anal Prolepse

Baladī *Ḥab.* III 49 (p. 310,ult - 311,8)

ذكر ما قال[٢١٧] فولس في ذلك [في خروج المقعدة وعلاج ذلك]

وقال فولس[٢١٨] انه قد يعرض للصبي خروج [٣١١] مقعدته فاذا عرض ذلك فاطل على مقعدة الصبي قاقيا مع عقيد العنب واطل عليها ذلك بعد ان تغسلها بالماورد[٢١٩] او فاطل عليها حب اس رطب مسحوقا مع مطبوخ عتيق وصب

٥ عليها ماء الجواشر +نيرا+[٢٢٠] وماء الملح

وقال في كُنَّاشِهِ الخ

Translation

The account of what Paul said about this [about the anal prolapse and its treatment].

Paul said: Sometimes anal prolapse befalls the child. If this happens, then apply on the anus of the child acacia with concentrated grape juice. Apply this on it after you have bathed him in rose water. Or apply on it pulverised wet myrtle seeds with old, cooked [wine]. And pour water of opoponax, ...?, and salt water.

Paul said in his *kunnāš* [follows III 59.12/ I p. 274,9-18].

### Commentary

Again one of the chapters where al-Baladī quotes both from the *Therapy* (l. ٢-٥) and from the *πραγματεία* (l. ٦).

L. ٥ جَوَاشر] *Opoponax*, the resin of *Opoponax chironium*, gr. *πάνακεc ʽΗράκλειον*; cf. Dietrich *Diosc. Triumph.* III 47.

Paul follows Aetius' (XIV 6)[221] lead in the treatment of the *procidentia ani* in his *πραγματεία*.

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[٢١٧] **C, D**: قاله

[٢١٨] **D** om.: في ذلك وقال فولس

[٢١٩] **A**: بماء الورد

[٢٢٠] **B**: الجراسر نيرا. **A, C, D**: الجوارين؟

[221]

## F 20 Protrusion of the Navel

Baladī *Ḥab.* III 50 (p.311,-6 - 312,6):

ذكر ما قاله فولس في ذلك [في خروج السُرة ونتوءها وعلاج ذلك]

قال[٢٢٢] فولس : انه قد يعرض للصبي خروج السرة إِمَّا من بكاء شديد او ضربة او سقطة او عطسة وقد ينتفع من ذلك ان تسحق نانَخْواه ويعجن بالماء ويطلى عليها ثم يوضع فوق هذا خِرقة كتّان يحرقان ويوضعان عليه[٢٢٣] ثم توضع عليها[٢٢٤] خرقة كتّان[٢٢٥] نقيّة وتربط *

وما حكاه عن اقريطن ان قال ضماد آخر وصفه اقريطن لسرة الصبي يمنع ان تنتنوا[٢٢٦] قال خذ راتينجا[٢٢٧] وهو صمغ الصنوبر وشبّا من كل واحد جزء يسحق الشبّ ويطبخ مع العسل [٣١٢] على جمر فاذا بدأ ينعقد فألْقِ عليه الراتينج وهو الصمغ الصنوبريّ مسحوقا وحرّكه فاذا انعقد فخذ منه شيئا يسيرا وضعْهُ على السرة وضعْ فوقها ورق لسان الحمل *

ضماد آخَر وصفه اقريطن خذ شبا يمانيا خمسةَ عشر درهما +وبرا[٢٢٨]+ ودُردي المطبوخ عشرة دراهم[٢٢٩] عفص درهمان اسحق الكل بمطبوخ عتيق واطله على السرة واجعل فوقه إسفنج قد أُنقع[٢٣٠] في خل وعُصر *

Translation

The account of what Paul said about this [about the protrusion and (excessive) growth of the navel, and its treatment].

Paul said: Sometimes the protrusion of the navel befalls the child, either because of strong weeping, or a blow, a fall, or a sneeze. Sometimes it is useful for this to pulverize ammi, to mix it with water, and to apply it onto it. Then put over this a linen cloth. Both are heated and put

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*myrrhae, thuris portiones aequas terito, & arido utere, ubi locum vino austero prius ablueris.*)

٢٢٢ **C**: وقال

٢٢٣ **A**, **C**: عليها

٢٢٤ **A**, **C**: فوق هذا.

٢٢٥ **D** om.: يحرقان ... خرقة كتّان

٢٢٦ **A**, **D**: تنتوا.

٢٢٧ **A**, **C**$^{2}$ (in marg.), **B**: راتينجا. **C**$^{1}$: اريانج.

٢٢٨ **A**, **C**$^{2}$(in marg.): وبرا. **D** om. **C**$^{1}$: اومر؟، **B**: وسرا.

onto it. Then put onto it a clean linen cloth, and bind it tight.

What Paul told in reference to Crito. He said: Another bandage, that was described by Crito for the navel of the child that prevents it from growing [excessively]. He said: Take *rātīnağ*, i.e. pine resin, and alum, of each one part. Pulverize the alum and cook it on embers with honey, and when it starts to coagulate, put in the *rātīnağ*, i.e. pine resin, pulverized. Stir it, and when it coagulates, take a little bit of it, and put it onto the navel. Put over it leaves of plantain.

Another bandage that Crito described. Take yemenite alum, 15 *dirhams*, ..?, the sediment of the cook [wine], 10 *dirhams*, galls, 2 *dirhams*. Pulverize everything with old, cooked wine, and apply it onto the navel. Pul upon it a sponge that has been soaked in vinegar, and wrung.

## Commentary

Paul first gives the aetiology for umbilical hernia (l. ٢-٣) and then gives three recipes, the first (l. ٣-٥) without any source, and in the case of the other two (l. ٦-٩, ١٠-١٣) stating that they go back to Crito.

L. ٣ نانَخْواه] *Ammi, Ammi visnaga*, gr. *ἄμμι*; cf. Dietrich *Diosc. Triumph.* III 59.

L. ٤ كَتَّان] *Flax/linen, Linum*, gr. *λίνον*; cf. WKAS I 54 b 33ff. and for بِزْر كَتَّان (*linseed, Linum usitatissimum*, gr. *λινόσπερμον*) Dietrich *Diosc. Triumph.* II 87.

L. ٦ اقريطن] Crito is the Roman court physician of emperor Trajan. Cf. Ullmann *Medizin* p. 71 and F. Kind *RE* II,2 (1922), col. 1935-8 (nr. 7).

L. ١٢ عَفْص] *Galls, gr. κηκίς*, vgl. Dietrich *Diosc. Triumph.* I 77.

L. ١٣ إِسْفُنْج] > syr. ܐܣܦܘܓܐ cf. Löw *Pflanzennamen* nr. 224 and Brock. *Lex. Syr.* 35 b, *sponge*, *σπόγγος*.

Paul deals here with omphical hernia (*πρόπτωσις ὀμφάλου*), a subject which he also treated in the *πραγματεία* (III 51 [I p. 263,3 ff. Heiberg]). The recipe l. ١١-١٣ is taken from there (PAeg. III 51[I p. 263,7-9]: *στυπτηρίας σχιστῆς < $\bar{\epsilon}$, τρυγὸς οἴνου < $\bar{\eta}$, ῥοδίνου < $\bar{\iota}$, κηκίδων ὀμφακίνων < $\bar{\beta}$· οἴνῳ διεὶς καὶ μέλιτος ποιήσας πάχος ἐπίβρεχε ἔξωθεν ἐπιρρίπτων σπογγάριον ὀξυκράτῳ δεδευμένον καὶ ταινιδίῳ καταλάμβανε*.). Paul also has a chapter on the surgical treatment of the ailment in the *πραγματεία* VI 51 (*Περὶ ἐξομφάλων*; I p. 89,21 ff. Heiberg). It is from this latter chapter that Rāzī *Ḥāwī* X 234,5-19 quotes and paraphrases. It is interesting that the first recipe from Crito, especially conceived for children (l. ٦: لسرة الصبي *for the navel of the child*), is missing in the *πραγματεία*, while the second, a more general one, is found there.

## F 21 Apoplexy

Baladī *Ḥab.* III 11 (p. 242, -5 - 244,8)

الدواء الجاري عشر في السكتة العارضة للصبيان ومداواتها

كما قد علمتم تحدث عن خلط غليظ بارد بلغمي يملأ بطون الدماغ نَفْسِهِ
فيمتنع الروح النفساني من النفوذ والعبور[٢٣١] في الأعصاب والنُخاع الى
٥ جميع البدن[٢٣٢] فيبطل حس الجسم وحركته وجميع أفعاله
والسبب في حدوث السكتة بالاطفال رطوبة أمزجتهم وايضا رطوبة أَدْمِغَتِهِم
ورطوبة أغذيتهم وانما يعرض لمن كان منهم نهيما[٢٣٣] ورَضَاعُهُ كثيرا او[٢٣٤] لمن
كان منهم عبلا سمينا وبطنه معتقلا[٢٣٥] بان[٢٣٦] عبل الجسم وسمنه يدل على
كثرة الأخلاط فيه والاعتقال سبب من اسباب الاحتقان والكثرة وتصاعد
١٠ البُخار والفضول الى أعالي الجسم والدماغ
واذا كان ذلك كذلك[٢٣٧] فيجب ان تلين[٢٣٨] طبائعهم بالشياف المسهل او الحقنة
لينجذب الفضل من أعالي[٢٣٩] الجسم الى اسفله وينبغي ان يجتهد[٢٤٠] في فتح
الفم وان يدخل فيه ريشة او إصبع مغموس[٢٤١] في دهن وشيء من إيَارَج
فِيقْرَا ويكبس أصل اللسان ويزعم الطبيعة للقذف ويحمّون بعدُ بالماء الحارّ
١٥ المطبوخ فيه النمّام والمرزنجوس والبابنج وإكليل الملك والشونيز وان كان
الماء مالحا او بورقيا او ماء البحر فهو اجود واخير[٢٤٢] وان لم يكن[٢٤٣] كذلك فلا
بأسَ ان[٢٤٤] يخلط بالماء شيءٌ من الملح والبورق او[٢٤٥] النطرون
وليلعق[٢٤٦] الصبي شيئا من العسل او يوجر ويسقى من الشراب العسل او[٢٤٧]

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٢٣١ om. **C**
٢٣٢ **C**: بدن
٢٣٣ **A**, **B**, **D**: فهما
٢٣٤ **A**, **C**: و
٢٣٥ **D**: معتقلان
٢٣٦ **A**: فان
٢٣٧ om. **C**
٢٣٨ **C**, **D**: تلان
٢٣٩ **D**:اعلى
٢٤٠ **A**: يجتهد
٢٤١ **A**, **C**: مغموسة
٢٤٢ **A**,**C**,**D**: ان شاء (om. **A**, **C**) الله تعالى
٢٤٣ om. **D**
٢٤٤ **A**, **C**: بان
٢٤٥ **C**, **D**: و

يداف العسل بالماء و يسقى إيّاه ويسخّن الراس ويدثر[٢٤٨] بعد الحميم لتبقى
٢٠ سخونته فيه ويوقى من الهواء البارد ويستعمل فيه الرضاع اذا امكن بعد ذلك ويصلح طبيعة اللبن الذي يرضعه بغاية ما[٢٤٩] يمكن ويقلل رضاعه تقليلا لا يضره معه وليكن بحسب ما[٢٥٠] يتولد في بدنه منه فضل يحدث له خَدَرا ويلزم[٢٥١] حميمه وتدبيره على هذا النحو الى ان يجوز عشرين[٢٥٢] يوما والى الاربعين يوما افضل

٢٥ فقد يجب ان يعلم ان السكتة التي تعرض للاطفال ليست كما يعرض[253] للشباب والكهول في شدة الخوف لقوة حرارتهم وقلة السبب المحدث لذلك فيهم وقوة الطبيعة وتيقظ[٢٥٤] فيهم وكذلك برؤهم منها اسرع وزوالها عنهم يكون هيّنا اذا تأتّى لها وفطن بها

فاما ان جهد امرها حتى يظن ان العارض منها هو الموت فكم من يدفن حيا
٣٠ لذلك[٢٥٥] وذلك ان هذا المرض والموت واحد في سكون الحركات والحس لا سيما اذا كان قويا ولا فرق فيه الاّ ان الانسان تفارقه الحيوة[٢٥٦] والروح الطبيعية وهو ميت والمسكت[٢٥٧] تكون الحياة والروح فيه خفيفة[٢٥٨] في بدنه ممنوعة من ان تفعل افعالها وانما يستدل عليها بحركات صدورهم الخفيفة[٢٥٨] وان منهم من يخرج من منخرَيْهِ نَفَسٌ ضعيف *

٣٥ ذكر ما قاله فولس في ذلك[٢٥٩]

قال فولس وقد يصيب الصبيان اكثر ذلك السكتة اذا احتبست طبائعهم واعتقلت بطونهم فينبغي ان يؤخذ جزءا من ماء الكُرُنب مع شيء من الملح

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[٢٤٨] **D**: يدبر
[٢٤٩] **C, D**: فلا
[٢٥٠] **A, C**: ما لا
[٢٥١] خَدَرا ويلزم. **A**: ضررا ويدام. **C**: ضرر او بدام. :**D**: ضرار او سلام
[٢٥٢] **C**: عشرون
[٢٥٣] **D**: تعرض
[٢٥٤] **A, C**: تيقظها. **D**: وتيقظها
[٢٥٥] **A, C**: كذلك
[٢٥٦] **D**: الحياة
[٢٥٧] **C**: السكتة

وعالجهم اشياف[٢٦٠] من اسفل *

Translation

The eleventh chapter on the apoplexy which befalls children and its treatment.

Paul said in what he composed in the *On the Regimen and Therapy of Children* the following: The apoplexy befalls them. Apoplexy — as you already have learned — happens because of a thick, cold and phlegmatic humour which fills the ventricles of the brain itself, so that the psychic pneuma [*ar-rūḥ an-nafsānī*, prob. *πνεῦμα ψυχικόν*] is prevented from going into, and passing through, the nerves and the spinal marrow to the whole body.Then sense perception, movement and the [other] functions of the body cease.

The reason for the occurrence of apoplexy in children is the moistness of their temperaments and also the moistness of their brains and moistness of their diet. It only befalls those who are gluttonous and who are breast-fed a long time, or those who are plump and fat, and who have suffered from constipation, since obesity and fatness of the body indicate a large amount of humours. Constipation is one of the reasons for the retention, and the large quantity and the rising of vapour and superfluities to the upper part of the body and the brain.

If this is so, it is necessary to soften their constitution with a laxative suppository or a clyster, so that the superfluity is drawn from the upper to the lower part of the body. It is necessary to take great pains to open the mouth, and to introduce in it a feather or a finger dripped into oil or something of the *ἱερὰ πικρά*, and to press on the root of the tongue, and to force the nature to expel. Afterwards they bath in warm water, in which thyme, marjoram, camomile, melilot, and black cumin have been cooked. If the water is salty, brackish, or sea water, it is excellent and very good. If it is not so, there is no obstacle to mix the water with some salt, borax, and natron.

The child should lick some honey, or it should be introduced in his mouth, and he should be given mead to drink, or honey should be mix with water, and he should be given it to drink. The head should be kept warm and covered after the bath, so that his heat remains in him, and he should be protected of the cold air. Breast-feeding should be undertaken, if possible, after that, and the nature of the milk, with which he is suckled, should be improved as much as possible. The breast-feeding should be reduced little by little so as not to harm him. It should be in proportion to whatever creates in his body a superfluity that [then] causes him a torpor. The bathing and therapy should be continued in this way until twenty days have passed, and until forty days is better still.

Yet one ought to know that the apoplexy which befalls children, is not like that which befalls adolescents and middle aged men as regards the high degree of concern, because of the intensity of their [bodily] heat, and the lack of a cause accounting for this in them, and the strength of their constitution and its excitement. Similarly one cures them of it more quickly, and freeing them from it is easy, if one approaches it and understands it.

As for when its situation becomes serious so that one thinks that what has occurred from it is death — oh how many have been buried alive because of this, since this malady and death are alike as regards the cessation of motion and sensation, especially when it is strong. There is no difference between them [apoplexy and apparent death] except the fact that life and the natural pneuma depart from one when one dies, yet in someone suffering from apoplexy life and the pneuma are [only] weak in the body and prevented from doing their actions. One can only recognize it [apoplexy] through the slight movements of their breasts. From the nose of some of them a weak breath comes forth.

The account of what Paul said about this. Paul said: Often the apoplexy occurs to children, when their constitution is obstructed and when they suffer from constipation. It is then necessary to take one quantity of cabbage water with some salt, and administer to them an enema.

## Commentary

Paul discusses in this chapter apoplexy in relation to children. He first gives a general explanation (l. ٢-٥) also found in the *πραγματεία* (III 17 [I p. 161,12 f. Heiberg]: *συνίσταται δὲ τὸ πάθος ἀθρόως ψυχροῦ πληροῦντος φλέγματος τὰς κυριωτάτας τοῦ ἐγκεφάλου κοιλίας*), and then the specifics in the case of children (l.٦-١٠). The description of different treatments follows in l. ١١-٢٤. He states that apoplexy in children is not as bad as in others (l. ٢٥-٢٨), and warns us not to confuse apoplexy with death (l. ٢٩-٣٤). Al-Baladī introduces a new fragment from Paul with the standard formula (l. ٣٥ f.): ذكر ما قاله فولس في ذلك قال فولس الخ *The account of what Paul said about this. Paul said etc.* This is slightly odd and opens the possibility that the whole of l. ٢-٣٤ is not from Paul's *Therapy* but from Rufus', although the title given in l. ٢ (في تدبير الصبيان وتربيتهم *On the Therapy and Upbringing of the Children*) strongly suggests that it is a quote from Paul rather than Rufus. The quote (l.٢٦-٢٨) consist of a short aetiology and a fairly simple treatment. Since the beginning of this quote is also found in **F 2** ٥, it might stem from the the discussion of breast-feeding rather than the specific chapter on apoplexy.

L. ١٤ إيَارَج فيقْرَا] (via pers.) < syr. ܐܝܪܐ ܕܦܝܩܪܐ < *ἱερὰ πικρά*, mostly consisting of aloe; cf. Ullmann *Medizin* p. 296. Anṭākī *Taḏkira* (print Bulāq 1282 AH) I 90, -7 gives the following information: (إيارَج) يُونانيٌ مَعْناهُ المُسْهِلُ وَعِنْدَهُمْ كُلُّ مُسْهِلٍ يُسَمَّى الدَّوَاءَ الإلهيَّ.

L. ١٥ نمّام] *(Wild) thyme*, *Thymus serpyllum*, gr. *ἔρπυλλος*; cf. Dietrich *Diosc. Triumph.* III 38.

III 39. بابُنَج] (pers.) *camomile*; for the different sorts of camomile and their Greek equivalent (*ἀνθεμίς*, *χαμαίμηλον*) cf. Dietrich *Diosc. Triumph.* III 129-131. شُونيز] *black cumin*, *Nigella sativa*, gr. *μελάνθιον*; cf. Dietrich *Diosc. Triumph.* III 74.

L. ٣٧ كرنب] *kurunb* or *karanb* > syr. ܟܪܢܒ > gr. *κράμβη* means *cabbage, brassica*; cf. WKAS I 150 a 41 ff. & I 562 b 21 ff. and Dietrich *Diosc. Triumph.* II 103 f.

L. ٣٨ اشياف] Probably *ašyāf* is just a secondary form for *šiyāf*, and not the plural cf. Dozy I 804 a and ad **F 3** ١٧.

Apoplexy in its suddenness and nearly complete incurability has moved the imagination of both the general public and of many men of letters throughout history.[261] Already Hippocrates was well aware that this disease is nearly incurable.[262] Galen in his *De locis affectis*[263] has discussed the subject, and Galen's discussion is reiterated in Paul's *πραγματεία* III 18 (*Περὶ ἀποπληξίας καὶ ἡμιπληξίας ἤτοι παραλύσεως* [I p. 161, 1 ff. Heiberg]). Other encyclopaedists like Oribasius (*Synops.* VIII 5) and Aetius (VI 27) have chapters *Περὶ ἀποπληξίας*. Rufus has dealt with tetanus [*kuzāz*] or seizures [*tašannuǧ*] in **F (R) 3** ٧-٩ and **F (R) 4**. Although the heading in this fragment is apoplexy [*sakta*] it seems likely that **F (R) 4** was a source of inspiration for Paul's treatment of the subject.

## F 22 Swallowed Bone

Baladī *Ḥab.* III 36 (p. 288, 15-17)

ذكر ما قاله فولس في ذلك [في إخراج العظم وغيره مما ينشب في حلق الصبي اذا بلعه]
وقال فولس في كتابه في تدبير الاطفال وتربيتهم : اذا بلع الصبي عظما ونشب في حلقه فخذ غراء الجلود واسخنه واطله على الموضع واغمز اللسان بإصْبَعِك فانه يزول

Translation

The account of what Paul said about this [about the removal of the bone or other things that stick in the throat of the child when swallowed]. Paul said in his book *On the Therapy and Upbringing of Infants*: When the child swallows a bone and it sticks in his throat, then take animal skin glue, heat it, and apply it upon the place. Touch the tongue with your finger, then it will disappear.

[261] One only has to think of the grandfather in A. Dumas' *Le Conte de Monte Christo*, who having lost nearly all his ability to move, governs the household only by the blink of his eye.

## Commentary

A short recipe against swallowed bones.

L. ٣ غِرَاء الجُلُود] This seems to be a short form for غِرَاء المُتَّخِذ مِنْ جُلُود الْبَقَر Baladī *Ḥab.* III 4 (p. 232,8) corresponding to *ταυρόκολλα* PAeg. III 3.6 (I p. 136,22).

In the manuscript *Parisinus Graecus* 2293 which contains a bilingual Greek-Arabic version of the *πραγματεία*, there is on $f^{p}5^{v}_{4\text{-}8}$ (only in Greek) the following provision for swallowed bones: *Πρὸς καταποθὲν ὀστέον/ καὶ παριστάμενον ἐν τῷ λαιμῷ. ξη/ρὸν ἄρτον δὸς φαγεῖν καὶ ἰαθήσεται. τινὲς/ δὲ καὶ ὀστάριον ἢ ἄκανθαν ἐκ τοῦ αὐτοῦ βρώμα/τος ἐπιτιθέασι τὴν κεφαλήν* [sic]. This would translate approximately as follows: *For the swallowed bone that is stuck in the throat. Give dry bread to eat, and it will be cured. Some also put a little bone or a spine from the same food onto the head*. This second treatment and the one in this fragment have the sympathetic approach in common. The glue can only be applied from the outside, yet it is thought to stick to the bone inside the throat and make it come out. Similarly, putting a splinter of bone from the same food onto the head of the child attracks the bone inside the throat, so that it comes out eventually.

## V. Appendix I — Fragments from Rufus' *Therapy of Children*

### F (R) 1 The Infant's First Nutrition

Baladī*Ḥabālā* II 38 (p. 210,-4-paen. Muḥ):

وليكن اول طعامه خبزا محكوما مبلولا في ماء العسل او اللبن او شراب ثم اطعمهم بعد ذلك الخبز وحده واسقهم في بعض الاحايين ماء وفي بعضها شرابا كما قال روفس *

His first food should be stale bread that has been dipped into water mixed with honey, milk or wine. Then after that feed them bread alone, and let them drink sometimes water, and sometimes wine, as Rufus said.

### F (R) 2 Temperament of the Child and his Drinking Wine

Baladī*Ḥabālā* II 44 (p. 213,-4 - 214,15):

الباب الرابع والاربعون – فيما ذكره روفس في امر مزاج الصبيان وشربهم الشراب:

قال روفس وان اقول ما عندي واكتب ما اعلم ان حرارة الصبيان ليست بالكثيرة على قدر رطوبتهم ويستدل على ذلك من استرخاء ابدانهم وضعفها خدرها وضعف اصواتها الخ [٢١٤]

The 44th chapter containing Rufus' discussion of the temperament of children, and their drinking wine.

Rufus said: I say what I have, and write what I know. The [bodily] heat of children is not a [very] strong one corresponding to their moisture. This can be deduced from the slackness, feebleness, and numbness of their bodies, and the weakness of their voice, etc.

### F (R) 3 Children's Diseases in General

Baladī*Ḥabālā* III 1 (p. 226,8 - 227,8 Muḥ):

ذكر ما قاله روفس في ذلك [في تعديد الامراض الخاصة الحدوث بسن الصبيان والاطفال].

قال روفس في كتابه تربية الاطفال

ان بمزاج الصبيان في الحميات مما يضرهم وربما عرض لهم من ذلك وجع

٥ والشراب وقال ...[**F (R) 10 b**ʼ] ثم قال وينبغي للمرضع ان تتلطف بسهولة لنبات الاسنان +لامكان+[٢٦٤] [٢٢٦] ما يعرض من التفزع والحمى وورم اللثة والقيء والاختلاف والسهر واجتناب الطعام ووسخ العينين وكثرة المراق في ذلك الوقت والكزاز مكروه فاذا عرض بعد الحمى ومن كان من الصبيان السمان يشتد نبات الاسنان ويهلك عاجلا ان عرض لهم كزاز بعد الحمى

The account of what Rufus said about this [about the enumeration of the illnesses that specially occur in infants and children].

Rufus said in his book *On the Upbringing of Infants*: The temperament of children during [periods of] fever contains something that harms them. Because of this sometimes a strong pain, stupidity and quasi-insanity befall them, and sometimes this befalls the child after having satisfied his appetite and thirst. He said ... [ʼ**F (R) 10 b**]. Then he said[265]: The wet-nurse ought to be able to deal with dentition easily, and ??? fear, fever, swelling of the gums, vomiting, diarrhoea, sleeplessness, anorexia, the dirt in the eyes, and large [swollen] abdomen[266] [occurring] at that time. Tetanus[267] is hateful, for when it occurs after a fever or to children that are obese, the dentition becomes violent, and they perish rapidly, if the tetanus befalls them after a fever.

**F (R) 4** **Seizures**

Baladī*Ḥabālā* III 17 (p. 252,10-253,ult.):

الباب السابع عشر في التشنج الذي يكون عن الامتلاء والرطوبة في الصبيان ومداواته:

ان بقراط ذكر هذا الصنف من التشنج الحادث عن امتلاء وانه يعرض للاطفال عند قربهم من نبات الاسنان وهذا النوع من التشنج متى عرض للاطفال بعد الحمى ولاسيما من كل [leg.: كان] منهم عبلا وبطنه معتقلا فانه

٥ رديء مهلك كما قال روفس في كتابه في تربية الاطفال فهذا قوله بلفظه.

والكزاز مكروه اذا عرض بعد الحمى ولمن كان من الصبيان السمان يشتد

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[264]Muḥ notes the "varia lectio" لكان, but neither of them makes good sense.

[265]The first part of this quote corresponds to Oribasius *lib. inc.* 42,6 (IV p. 149, 4-10 Raeder): *δεῖ δ' εἰδέναι* [sc. *τὴν τιτθὴν*] *καὶ ὡς ῥᾷστα φύσαι τοὺς ὀδόντας. πολλὰ γοῦν καταλαμβάνει δυσχερῆ περὶ τὴν ὀδοντοφυΐαν, καὶ σπασμοὶ καὶ πυρετὸς καὶ φλεγμοναὶ τῶν οὔλων καὶ ἔμετοι καὶ διάρροιαι καὶ ἀγρυπτίαι καὶ ἀποσιτίαι, καὶ δακρύει καὶ πτύει ὕφαιμον.*

[266]مراق denotes the *soft parts* [of the abdomen]. I know one place with a Greek parallel, Ibn Sarābiyūn BR 19891 f. 37$^{r}_{-3}$ - 38$^{v}$...: تدفعه [النَفَس] الى نحو المراق rendered by the Latin translator as *aut imbellat ibsum ad bartem mirach*, corresponding to

نبات الاسنان ويهلك عاجلا ان عرض لهم كزاز بعد الحمى
هذا النوع من التشنج هو الذي يعرض للاطفال كثيرا لرطوبة امزجتهم واعضائهم ولينها وضعفها وضعف ادمغتهم وكثرة رضاعهم واغذيتهم الخ

The 17th chapter on seizures that occur because of repletion and moistness in children, and their treatment.

Hippocrates mentioned this kind of seizure that occurs because of a repletion[268]. It befalls children when they are close [to the age of] dentition. This sort of seizure when it befalls the children after a fever and especially [when it befalls] obese children suffering from constipation, is bad and deadly, as Rufus said in his book *On the Upbringing of Children*. This is a literal quote:

The tetanus[267] is hateful, when it occurs after a fever or to children that are obese, the dentition becomes violent, and they perish rapidly, if the tetanus befalls them after a fever.

This kind of seizure is the one that often befalls children because of the moisness, softness, and feebleness of their temperaments and their organs, the feebleness of their brains, and the great amount of breast-feeding and food [in general]. Etc.

**F (R) 5** **Moisture in the Ears**

**F (R) 5 a** — Baladī *Ḥabālā* III 22 (262,-5 - 263,1):

ذكر ما قاله روفس في ذلك [في الرطوبة العارضة في آذان الصبيان وعلاجها]:
قال روفس فاما رطوبة اذان الصبيان فينبغي ان تعالج بصوفة مبلولة بشيء من شب توضع في اذان الصبي ونبيذ وباقلى مصري ... قال روفس والرطوبة تعرض لاذان الصبيان من كثرة رضاع اللبن من اجل ذلك يظن كثير من الاطباء ان القيح الذي في اذانهم هو لبن [٢٦٣] فمن منع الصبي من الشبع من اللبن كف عنه رطوبة الاذان وراى ما احب *

The account of what Rufus said about this [about the moisture that occurs in the ears of children, and its treatment]. Rufus said: It is necessary to treat moisture in the ears with a piece of wool dripped in a bit of alum, wine, and Egyptian beans, that is placed in the ears of the child. [...] Rufus said: The moisture befalls the ears of the children because they are breast-fed with a large quantity of milk. For this reason many physicians think that the discharge that is in

the ears of the children is milk, so that if someone prevents the child from satisfying his appetite in milk, he hinders moisture in the ears [to occur] in him. Think what you please.

**F (R) 5 b** — RāzīḤāwī III 55, paen. - 56,2/ 470 D-R:

روفس في تدبير الاطفال ؛ قال يجعل فيها [sc.: الاذان] صوفة مبلولة ملوّثة في شب او نبيذ عتيق او عسل وترمس ، وفي اذان الصبيان رطوبة يحسبها [٥٦] الجهال مدة وانما هي فضل غذاء فاذا رايت ذلك فمُرْهُم لا يرضعون بالليل فان كثرة تلك الرطوبة تذهب وتجف الاذان *

Translation Rosenthal[269]:

Rufus on the Treatment of Infants: A moistened piece of wool soaked in alum or old date wine or honey and lupine is put onto the ear....

In the ears of children there is some moisture, which the ignorant regard as pus, but it is only an excretion of food. When you see this, take care that they are not suckled at night. Then this moisture will largely disappear, and the ear becomes dry.

**F (R) 6** **Inflammation in the Ears**

This fragment is either by Rufus or by Paul (’ **F 8** Paul).

**F (R) 7** **Thrush**

**F (R) 7 a** — BaladīḤabālā III 30 (p. 273, ult. - 274, 13 Muḥ).

ذكر ما قال روفس في ذلك [في القلاع العارض للصبيان وعلاجه]

قال روفس يعرض للصبيان قروحٌ تخرج [٢٧٤] في افواههم لون بعضها ابيض وبعضها اسود كانها اثر كيّ فما كان منه اسود على هذا النعت فهو وَبالٌ على صاحبه وهو يخرج بالصبيان في اهل مصر كثيرا ومن اجل ذلك تسمى هذه ٥ العلة القرحة المصرية وربما عرضت هذه القرحة بعد حمى صالب وربما عرضت الحمى بعد خروج القرحة وقد يعرض عليها كزاز وافتراق الحس وعسر النَفَس وعسر حركة العنق وتنقلب العينان ويبلغ الفساد الى الرئة فيهلك الصبي *

واما الدواء لهذا المرض فاني سأصف ما يستقيم من العلاج لمثل ذلك فعالجْه
١٠ باصول السوسن المسحوق مع شيء من عسل وانفخ السوسن ايضا يابسا في
فم الصبي فانه موافق وورق الورد اليابس وزهر الزعفران والمر والعفص
والكندر فان هذا كله نافع موافق ان عولج به *
فان جميع ما وصفت لك وعولج به القروح مع شيء من عسل وينبغي ايضا
ان يسقى الصبي بعد علاجه بهذا الدواء عسلا ممزوجا بماء فاتر بعصارة رمان
١٥ حلو *

The account of what Rufus said about this [sc. the thrush that befalls the children, and its treatment].

Rufus said: Children are beset by ulcers that come out in their mouths, the colour of some of which is white, and of others black as if they were a mark of cauterization. The ailment that is black according to this characterization is a curse for those who have it. It often comes out in children among the population of Egypt, and for that reason this ailment is called Egyptian boil. Sometimes this boil occurs after a hot fever, and sometimes the fever occurs after the boil's coming out. Sometimes attendant symptoms such as tetanus, loss of sensation, difficulty of breath, and difficulty to move one's neck occur, the eyes are turned inside out, and the corruption reaches the lungs, so that the child dies.

As to the remedies for this disease, I shall describe a treatment that is sound like the following: Treat him with roots of iris with some honey. Blow also dry iris into the mouth of the child, for it is appropriate, and dry rose leaves, saffron flowers, myrrh, galls, and frankincense. All this is helpful and appropriate when he is treated with it.

All I have described for you, and with which the boils are treated, [should be] with some honey. It is also necessary to let the child drink after his having been treated with this remedy honey mixed with tepid water and sweetened pomegranate juice.

**Commentary**

This fragment corresponds to nearly exactly to Oribasius, *Lib. Inc.* 43, 1-4 (IV p. 150,13-27), so that this quote proves that the chapter there is not by Galen as stated in the manuscripts, but by Rufus, as already assumed by Ilberg *Rufus* p. 30.

**F (R) 7 b** — Rāzī *Ḥāwī* III 201,9 - 14/ (474-5 D-R)

روفس في تدبير الصبيان ، القلاع الاسود قاتل للصبيان ويعرض بهم كثيرا ولهذا تسمى القرحة المصرية وغير الاسود يذر في افواه الصبيان اصول السوسن مسحوقة او ورد يابس وزعفران وفلفل ومر وعفص وكندر فان هذه مفردة ومركبة نافعة للطفل فان جعل معها عسل نفع ويسقى الصبي بعد ان يعالج بهذا عسلا ممزوجا او عصارة رمان حلو *

Translation Rosenthal[270]:

Rufus on the Treatment of Children: Black mouth thrush is fatal to children. It occurs frequently in Egypt, hence it is also called the Egyptian boil. In the case of the mouth thrush that is not black crushed roots of iris or dried roses, saffron, pepper, myrrh, gallnuts and frankincense are sprinkled into the children's mouths. This simple compound is beneficial for the infant. It is helpful to add honey to it. After the child has been treated with it, he is given mixed honey or sweetened pomegranate juice to drink.

**F (R) 8** **Dentition**

**F (R) 8 a** — Baladī *Ḥabālā* III 32 (p. 277, 13 - 20 Muḥ).

ذكر ما قال روفس في ذلك [في الاوجاع التي تعرض للطفل عند نبات الاسنان وعلاج ذلك].

قال روفس ينبغي اذا بلغ الصبي وقت نبات الاسنان ان[٢٧١] يُتَعَاهَدَ بالحميم بالماء الحار وان يكون طعامه يسيرا وان طال به الاختلاف فليعصب بطنه يكف عنه ذلك مثل عصاب الكمون بالصوف والانيسون وبزر الكرفس وبزر الورد ايضا كذلك موافق وان كان بطن الصبي عسرا فينبغي ان يلين بعسل يهيأ مثل فتيلة فان في ذلك كفاية لاستخراج شيء من الفضول في كل يوم وذلك في الزمان ينبغي ان نلزم المرضع الطعام والشراب الموافق وان تهتم بمصلحة الصبي وتوقيه كل التوقي وان لا يدخل احدا فزعا ولا مكروها *

The account of what Rufus said about this [about the pains that befall that child during the dentition and its therapy].

Rufus said: When the child reaches the time of dentition it is necessary to send him frequently to be bathed in warm water, and to let him eat sparsely. If the diarrhoea remains in him for a

[270] *ibid*

long time, so bind his stomach [so] that it ceases, with, for example, a dressing of cumin in wool, and anis, and seeds of celery and roses are appropriate, too. If the stomach of the child is upset, one ought to sooth it with honey that forms a sort of suppository, since it is sufficient for the removal of some of the superfluities each day. During this period [?] it is necessary that the wet-nurse sticks to the appropriate food and drink, is interested in the well-being of the child, takes the greatest care of him, and does not let any frightening or despised person in.

**F (R) 8 b** — Baladī*Ḥabālā* III 47 (p. 309, 3 - 6 Muḥ).

ذكر ما قال روفس فى ذلك [في الاختلاف العارض للصبيان وعلاجه]

ينبغي اذا بلغ الصبي وقت الاسنان ان[٢٧١] يُتَعَاهَدَ الصبيُّ بالحميم بالماء الحار والمرخ وان يكون طعامه يسيرا وان طال به الاختلاف مثل عصاب الكمون بصوف والانيسون والكرفس وبزر الورد موافق لذلك *

The account of what Rufus said about this [about the diarrhoea that befalls children and its treatment].

Rufus said: When the child reaches the time of the teeth it is necessary to send the child frequently to be bathed in warm and flaccid water, and to let him eat sparsely. If the diarrhoea remains in him for a long time, a dressing, for example, of cumin in wool, and anis and celery and, seeds of roses are appropriate for it.

**F (R) 9** **Constipation**

Baladī*Ḥabālā* III 48 (p. 309, -5 - ult. Muḥ).

الباب الثامن والاربعون فيما يعرض للاطفال من الحصر والاعتقال وعلاج ذلك

قال روفس اذا كان البطن معتقلا في الصبيان خاصة اعتقالا عسرا فينبغي ان يلين بعسل مطبوخ يهيأ فتيئل وحبق مسحوق وهو ريحان معجون بعسل ويعمل فتيلة ايضا وتامر المرضع ان تلزم الطعام والشراب والتدبير المعين على لين الطبيعة * ٥

The 48th chapter about the constipations that befall children and their treatment.

Rufus said: If the stomach is constipated in children, especially if badly constipated, then it is necessary to sooth it with honey [mixed with] cooked [wine] that forms suppositories, and pulverized basil being fragrant, kneaded together with honey, also made into a clyster. The wet-nurse should stick to food, drink, and a [general] regimen that is specific for soothing the constitution

**F (R) 10** **Boils**

**F (R) 10 a** — Baladī *Ḥabālā* III 51 (p. 312,-4 - 313,10 Muḥ).

الباب الحادي والخمسون – في البثور والقروح التي تعرض للاطفال عند ولادهم او يولدون وهي بهم وعلاج ذلك

قال روفس انه قد يعرض لجلد الصبي قروح تعرض من رداءة اللبن ومن خُبْث هضمهم ومعدهم وربما الزمه [fort. leg.: لزمه] ذلك من كينونة في رحم امه فاذا ظهر منه شيء فينبغي للمرضع ان يفرج به فان ذلك يحلل ادواء عظيمة كانت في باطن البدن لو بقيت خيف عليه ان يصيبه من ذلك مكروه ولكن يدارى باحسن مداراة حتى ينقطع ثم يعالج بالحميم الذي قد اغلي فيه شيء يسير من اس او قضبان شجرة المصطكى او ورد ودهن ورد ويدهن به ويطلى بمرهم يعالج باسفيداج وينبغي ان يعالج عند ابتداء العلة بكثرة الحميم بالماء الحار الذي لا يخالطه شيء مما ذكرت ثم يحم بالماء الذي ادخل فيه شيء من نطرون وليجفف تلك الرطوبة فهذا علاج القروح التي تظهر في جلد الصبي وينبغي ان يكون طعام المرضع صالحا من الطعام والشراب ولا تتملأ ولا تدع اخذها ما[٢٧٢] يحتاج اليه فالشبع يفسد المعدة وقلة الطعام يُمِرَّ اللبن[٢٧٣] فهاتان الخصلتان مخالفتان *

[٣١٣]

The 51th chapter on the pustules and ulcers that befall children when they are born, or that they already have when they are born, and their treatment.

Rufus said: Sometimes children are beset by ulcers that occur because of the bad quality of the milk, and the difficulties of their digestion. Sometimes this persists in him because of an existence [i.e. something existing] in the womb of his mother. If something of this becomes apparent, than the wet-nurse ought to rejoice in it, for this counteracts great illnesses in the inner parts of the body, which if they stayed, would lead one to fear for him [sc. the patient], lest some mishap might come over him because of this. Yet treated with the greatest care, this will disappear.[274] Then treat him with a bath in which some myrtle has been cooked, or cut-off branches of the mastic-tree, or roses, and oil of roses. Anoint him with it, and apply a cream the active component of which is ceruse. At the beginning of the malady he ought to be treated

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[٢٧٢] coni. e III 1 (اخذ ما); Muḥ: احدهما quod vix intellegeres.

[٢٧٣] الطعام بمر اللبن e III 1 sumptum pro quo Muḥ اللبن البدن habet.

with quantity of bathing in warm water to which nothing is mixed of what we have [just] mentioned. Let him bath in water to which some natron is added, so that this moisture is dryed out. This is the treatment of the ulcers that befall the child. The food of the wet-nurse should be sound of both food and drink, and let her not be filled [with food and drink], and let her not take what is needed[275], for satiation corrupts the stomach, and a sparse diet makes milk bitter. These two characteristics are adversarial.

**F (R) 10 b** — Baladī *Ḥabālā* III 1 (p.226,11-paen.):

قال قد يعرض في جلد الصبي قروح تعرض من رداءة اللبن ومن خُبْث هضم معدهم وربما لزمه ذلك من كينونة في رحم امه من ابذان الصبيان بذلك ادواء عظيمة كانت في باطن الجسد لو بقيت خيف عليه ان يصيبه من ذلك مكروه ولكن تدارى باحسن مداراة حتى ينطفي ثم يعالج بالحميم بالماء الذي قد اغلي فيه شيء من اس او قضبان شجرة المصطكى وورد او دهن الورد ويدهن بدهن ورد ويطلى بمرهم معالج باسفيداج وينبغي ان يعالج عند ابتداء العلاج بكثرة الحميم بالماء الحار الذي لم يخالطه شيء مما ذكرناه ثم يحم بالماء الذي ادخل فيه شيء من نطرون ليجفف تلك الرطوبة فهذا على القروح التي تظهر في جلد الصبي وينبغي ان يكون طعام المرضع صالحا من الطعام والشراب ولا تملأ منه ولا تدع اخذ ما يحتاج اليه من اجل ان الشبع يفسد المعدة وقلة الطعام يمر اللبن فهاتان الخصلتان مخالفتان *

**Commentary**

This is identical with the chapter *Περὶ τῶν παιδικῶν ἐξανθημάτων* in Oribasius *Lib. Inc.* 42 (IV p. 148, 17 - 149,4 Raeder).

## F (R) 11 Dermatological Disorders

The continuation of this fragment is found in Paul's Therapy, where he quotes from Rufus' *Therapy* (’ **F 14**).

## F (R) 12 Dangers of Stopping the Breast-Feeding Artificially

RāzīḤāwī VII 6,9-11

روفس في تدبير الاطفال ؛ قال : النساء اللواتي يحرصن على قطع اللبن بشرب العقاقير يفسد منهن الثدي ويجسو حتى يحتاج هؤلاء الى البط ، الباذروج يقطع لبن المعز اذا رعته *

Translation Rosenthal[276]

Rufus on the Treatment of Infants: Women who want to stop the milk by taking drugs injure and harden their breasts thereby, and are finally obliged to have them opened by the lancet. Basil [*Ocimum basilicum L.*] stops the milk of the goats when they feed on it.

## F (R) 13 Curdling Milk

**F (R) 13 a** — RāzīḤāwī VII 273,2- (D-R. 491):

قال [sc: روفس]: وفي تربية الاطفال انك اذا اجمدت اللبن وذررت فيه حلتيتا حلله من ساعته فلذلك هو اوفق شيء لمن يتجبن في معدته

Translation Rosenthal[277]:

On the Rearing of the Infants: When you allow milk to curdle and sprinkle asafoetida into it, it dissolves it immediately. Hence it is most suitable for somebody in whose stomach milk tends to curdle.

**F (R) 13 b** — From the same context is RāzīḤāwī XIX 372,4-6:

روفس في كتابه في تدبير الاطفال ، اللبن الجامد، قال : أعْطِ مَنْ جمد اللبن عصارة الفوتنج فانه يحله من ساعته ، او اسقه حلتيتا فانه يحله على المكان

Translation:

Rufus in his book on the *Treatment of Infants*. Curdling Milk. He said: Give to those whose milk curdles mint juice, and it will dissolve it immediately. Or let them drink asafoetida, and it will dissolve it immediately.

**F (R) 13 c** — Rāzī *Ḥāwī* XIX 410,5 f.

روفس : في تدبير الاطفال : الحبق البري يحل اللبن [هكذا في د و ف. الاصل: الدم] الجامد[٢٧٨] من ساعته *

Rufus *On the Treatment of Infants*: Wild basil dissolves curdled milk [varia lectio: blood] immediately.

**F (R) 13 d** — Rāzī *Ḥāwī* XIX 414,6-9[279]

قال روفس في كتاب الاطفال : ان الحبق يحلل اللبن حتى يصير ماء فلذلك يسقى عصارته من تجبن اللبن في المعدة ، لانه يحلله الْبَتَةَ *

قال الحلتيت ايضا يحلل اللبن الجامد وهو علاج جيد لذلك فانه من ساعته *

Translation:

Rufus said in the *Book of Infants*: Basil dissolves milk so that it becomes water. For that reason, its juice is given to drink to those whose milk curdled, since it dissolves it completely.

He said: Asafoetida also dissolves curdling milk. It is a very good treatment for this, since it [is effective] immediately.

**F (R) 13 e** — Rāzī *Ḥāwī* Latin Translation[280]:

Ait Ruffus in libro de nutriendis infantibus: cura lactis coagulati in stomaco est sumere succum mentastri cum lacte: quia velociter solvetur.

## Commentary

All these fragments seem to go back to Oribasius *Lib. Inc.* 31,13 f. (IV p. 123,1-7): *Ἡ δὲ μίνθη τοσοῦτόν ἐστι κακόν, ὥστε εἰ ἐμβάλοις τὸ γάλα, ὑγρὸν ποιεῖ τὸ γάλα, καὶ οὐδὲν ὑπ' αὐτοῦ πήγνυται. διὸ καὶ πιγομένῳ τινὶ ὑπὸ γάλακτος ἅμα γίνεται ὁ χυλὸς τῆς μίνθης πινόμενος. τὸ δὲ σκόροδον ... κάκιστον. δεύτερον δὲ κρομμυον καὶ πράσον καὶ ὤκιμον καὶ κάρδαμον κτλ.*

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[278] The Latin (t. II f° 498$^{v}_{b\ 27\ f.}$): *Ait Ruffus in libro nutrimenti puerorum caseus dissolvit subito lac coagulatum*, thus confirming the reading adopted by me.

[279] For line 9 I have given the reading of the Bodleian Library, Oriental Collections, Ms. Marsh 156 (Cf. J. URI, *Bibliothecae Bodleianae Codicum Manuscriptorum Orientalium ... Catalogus*, Pars prima, Oxonii 1787, nr. 565) f° 505$^{v}_{o\ ff.}$

[280] I quote from the printed text Venice 1509 the title of which is: *Continens Rasis ordinatus et correctus per Clarissimum artium et medicine doctores magistrum Hieronymum Surianum: Nunc in camaldulensi ordine Deo dicatus Ultimo Impressus.* and the explicit of which is: *Impressum Venetiis per Bernardinum Benalium. Anno salutifere incarnationis millesimo quingentesimo nono. v. kalendas aprilis.*, t. II f° 498$^{v}_{a\ -27\ ff.}$.This is missing in the printed Arabic edition (and Ms. Marsh 156 f° 504$^{r}_{7\ ff}$) where is should come shortly before XIX 406, 5 ff (in small print the parts that are not in the Latin): وقال من شرب لبنا فتجبن في معدته اخذه الخُناق وضيق النَفَس ، ويغشى عليه ، فاسقه خلا وماء او يسقى من الفوتنج المجفف وزن خمسة دراهم الخ *He said: Who drinks milk which then curdles in his stomach is seized by suffocation and shortness of breath, and loses consciousness. Let him*

**F (R) 14** **Spitting Blood**

Rāzī*Ḥāwī* IV 65,10 f.

روفس في كتابه في تربية الاطفال ، قال اذا انت سقيت عصارة البادروج من ينفث الدم قطع عنه ذلك المكان[٢٨١] *

Rufus in his book *On the Upbringing of Infants.* He said: If you let someone who spits blood drink basil juice, then it stops this immediately.

# VI. Appendix II — Bibliography

## Primary sources (prints and manuscripts)


| | |
|---|---|
| Aetius of Amida | *Libri Medicinales*, ed. A. Olivieri, CMG VIII 1-2, Lipsiae et Berolini, 1935/50 (only books I-VIII).<br>Book XIV printed in Basle 1535: *Tomus tertius habet Aetii Amideni medici clarissimi de re medica libros tres, Ioanne Baptista Montano medico Veronense interprete.* |
| Anṭākī | *K. Taḏkirat ulī l-albāb li-Dāwūd al-Anṭākī*, 2 voll., Bulāq 1282 AH (abbr. Anṭākī *Taḏkira* ) |
| Al-Baladī | *K. Tadbīr al-Ḥabālā wa-l-aṭfāl*, ed. Maḥmūd al-Ḥāǧǧ Qāsim Muḥammad, Bairūt 1980 (abbr.: Baladī *Ḥabālā*)<br>Mss listed p. 13. |
| Bar Bahlūl | *Lexicon Syriacum auctore Hassano Bar Bahlule*, ed. R. Duval, 3 voll., Parisiis 1901 (abbr.: Duval Bar Bahlūl) |
| Barhebraeus | *K. Muḫtaṣar ta'rīḫ ad-duwal li-a. l-Faraǧ b. al-'Ibrī*, ed. Anṭūn Ṣāliḥānī, Bairūt 1890, 2. Aufl. Bairūt 1958 |
| Damnastes | *Περὶ κνουσῶν καὶ βρεφῶν θεραπείας*, excerpt from Laurentianus plut. 74,2 f° 281$^{v}$ |
| Dioskurides | *Pedanii Dioscuridis Anazarbei de Materia Medica libri quinque edidit* Max Wellmann, Berolini |
| Galen | *Claudii Galeni opera omnia*, ed. G. Kühn, 20 voll., Lipsiae 1821-33 |
| —— | *Cl. Galeni Scripta minora*, ed. I. Marquardt et al., 3 voll., Lipsiae 1891 |
| Ibn Abī Uṣaibi'a | *K. 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā'*, ed. A. Müller, 2 voll., Kairo und Königsberg 1884 |
| Ibn an-Nadīm | *Kitāb al-Fihrist* ,ed. G.Flügel, 2 voll., Leipzig 1871 f. |
| Ibn Sīnā | *Qānūn fī ṭ-ṭibb* , 2 voll., Būlāq 1294/1877<br>*Qānūn fī ṭ-ṭibb* , 5 voll., Bairūt 1408/1987 |
| Ibn Sarābiyūn | *Al-kunnāš aṣ-ṣaġīr*: Ms Brussels BR 19891 |
| | lat. translation: *Practica Joannis Serapionis aliter breviarium nuncupata*, Lugduni 1525 |
| Al-Maǧūsī | *Kāmil aṣ-ṣinā'a aṭ-ṭibbīya* (*al-Kitāb al-Malakī*), 2 voll., Būlāq 1294 |
| Paulos v. Aigina | Paulus Aegineta, ed. I.L. Heiberg, *CMG* IX 1.2, Lipsiae et Berolini, 1921/1924 |
| —— | *Kunnāš Baulus* (the arabic translation) *Parisinus Graecus* 2293 |
| Oribasius | *Collectiones Medicae*, ed. I Raeder, *CMG* VI 1-2, Lipsiae et Berolini, 1928-33 |
| —— | *Synopsis ad Eustathium*, ed. I Raeder, *CMG* VI 3, Lipsiae et Berolini, 1926 |

| | |
|---|---|
| Ar-Rāzī | *K. al-Ḥāwī fī ṭ-ṭibb*, 23 voll., Ḥaidarābād 1955 ff. |
| —— | *Continens Rasis*, Venetiis 1509 |
| —— | *Continens Rasis*, Venetiis 1529 |
| Rufus | Œuvres de Rufus d'Éphèse, edd. Ch. Daremberg, É. Ruelle, Paris, 1879 |
| Soranus | *Gynaecia*, ed. I. Ilberg, *CMG* IV, Lipsiae et Berolini, 1927 |
| Suda | ed. A. Adler, 5 voll., Leipzig 1928-38 |
| Tobler, T. & A. Molinier | *Itinera Hierosolymitana*, 2 voll., Genevae 1879 |
| Yāqūt | *K. Muʿǧam al-buldān*, ed. F. Wüstenfeld, 6 voll., Leipzig 1866 ff. (abbr.: Yāqūt *Buldān*) |


## Secondary literature


| | |
|---|---|
| Adams, F. | *The Medical Works of Paulus Aegineta .. Translated into English with a Copious Commentary*, 3 voll., London 1834 ff. |
| Berendes, I. | *Paulos von Aegina. Des besten Arztes sieben Bücher*, Leiden 1914 (abbr.: Berendes *Paulos*) |
| Brockelmann, C. | *Lexicon Syriacum*, Halis Sax. $^{2}$1928, (abbr. Brock. *Lex. Syr.*) |
| Burkert, W. | *Lore and Science in Ancient Pythagoreanism*, Harvard 1972 |
| Campbell, D. | *Arabian Medicine and its influence on the Middle Ages,*2 voll., London 1926 |
| H. Cancik & H. Schneider | *Der Neue Pauli*, Vol. 1 ff., Stuttgart/Weimar 1996 ff. |
| Dagorn, R. | "Al Baladi: Un Médecin obstétricien et pédiatre à l'epoque des premiers Fatimides du Caire" in: *Mélanges de l'Institut Dominicain d'Études Orientales du Caire* 9 (1969) 73-118 (abbr.: Dagorn *Al Baladi*) |
| Derek Latham, J. | "'*MAḤMŪD*' and 'laudable'" in: *JRAS* n.s. 1977, p. 31-40 |
| Diepgen, P. | *Frau und Frauenheilkunde in der Kultur des Mittelalters*, Stuttgart 1963 |
| Diehls, H. | *Die Handschriften der Antiken Ärzte*, 2 voll., Berlin 1906-7 |
| Dietrich, A. | *Dioscurides Triumphans. Ein anonymer arabischer Kommentar (Ende 12. Jahrh. n. Chr.) zur Materia medica,* AAWG phil.-hist. 3. Folge Nr. 172 & 173, Göttingen 1988 (abbr.: Dietrich *Diosc. Triumph.*) |
| —— | *Die Dioskurides-Erklärungen des Ibn Baiṭār. Ein Beitrag zur Pflanzensynonymik des Mittelalters*, AAWG phil.-hist. 3. Folge Nr. 191, Göttingen 1991, (Abk.: Dietrich *IBTafsīr*) |
| Dimitriadis, K. | "Ein siebenbändiger Paulus von Aigina *Περὶ οὔρων* und wie er zu Stande kam." in: G. Keil (Hg) *Fachsprosa-Studien,* Berlin 1982 |
| Duffy, J. | "Byzantine Medicine in the Sixth and Seventh Centuries: Aspects of Teaching and Practice" in: J. Scarborough, *Symposium on Byzantine Medicine,* Dumbarton Oaks |

| | |
|---|---|
| Etienne, R. | "Ancient Medical Conscience and the Life of Children" in: *Journal of Psychohistory* 4 (1976), p. 131-161 |
| Heiberg, J.L. | "De codicibus Pauli Aeginetae observationes" in: *REG* XXVI (1919) p. 268-277 |
| Hunger, H. | *Die hochsprachliche profane Literatur der Byzantiner* 2 voll., Handbuch der Altertumswissenschaften V 1, München 1978 |
| Gil'adi, A. | *Children of Islam. Concepts of Childhood in Medieval Muslim Society*, London 1992 |
| Ilberg, J. | *Rufus von Ephesos. Ein griechischer Arzt in trajanischer Zeit*, in: *Abh. der. phil.-hist. Kl. der sächsischen Akademie der Wissenschaften*, XLI 1, Leipzip 1930. |
| Joannidès, Dimitri C. | *La gynécologie et obstétrique de Paul d'Égine et son influence sur la médecine arabe*, Kairo 1940 |
| Kahle, E. | *Avicenna (Ibn Sīnā) über die Kinderkrankheiten in seinem Qānūn,* Erlangen 1979 |
| —— | *Das Ammenregimen des Avicenna (Ibn Sīnā) in seinem Qānūn*, Erlangen 1980 |
| —— | *Al-Maǧūsī (Haly Abbas) über Kinderkrankheiten im Kāmil aṣ-ṣinā'a aṭ-ṭibbīya*, Erlangen 1980 |
| Kroll, W. | "Bolos und Demokritos" in: *Hermes* 69 (1934) p. 228-232. |
| Kunitzsch, P. & M. Ullmann | *Die Plejaden in den Vergleichen der arabischen Dichtung,* (=*Beiträge zur Lexikographie des Klassischen Arabisch* Nr. 9), SBAW phil.-hist. 1992.4, München 1992 |
| Lameer, J. | "From Alexandria to Baghdad: Reflections on the Genesis of a Problematical Tradition" in: G. Endress, R. Kruk (Hg.) *The Ancient Tradition in Christian and Islamic Hellenism* (Festschrift Drossaart Lulofs), Leiden 1997 |
| Leclerc, L. | *Histoire de la médecine arabe*, 2 voll., Paris 1876 |
| Liddell, H.G. & R. Scott | *A Greek English Lexicon ...,* New Edition by St. Jones, Oxford 1940, *New Supplement* 1996 (abbr.: *LSJ*) |
| Löw, I. | *Aramäische Pflanzennamen*, Leipzig 1881 (abbr.: Löw *Pflanzennamen*) |
| —— | Review: "*R. Payne Smith, Thesaurus syriacus*. Oxonii Fasc. IX." in: *ZDMG* 47 (1893) p. 514-537 (abbr.: Löw *Paulouszitate*) |
| Maier, F.G. | *Cypern Insel am Kreuzweg der Geschichte,* Urban Taschenbücher 81, Stuttgart 1964 |
| Meyerhof, M. | "Joannes Grammatikos (Philoponos) von Alexandrien" in: *Mitteil. Dt. Inst. Ägypt. Alterumskunde in Kairo* 2 (1932), p. 1-21 |
| —— | "Von Alexandrien nach Bagdad. Ein Beitrag ..." in: *Sitzungsberichte der preuss. Ak. Wiss. Phil.-Hist. Kl.* 23 (1930), p. 387-429 |
| Nöldeke, Th | *Th. Nöldekes Belegwörternuch zur klassischen Arabischen Sprache*, ed. J. Krämer, Lfg. I.II, Berlin 1952-54 |
| Puschmann, T. | *Handbuch der Geschichte der Medizin*, hsgb. von M. Neunurger und J. Pagel, voll. I-III, Jena 1902-1905 |

ROSENTHAL, F. — *Das Fortleben der Antike im Islam*, Zürich/Stuttgart 1965 (abbr.: ROSENTHAL *Fortleben*)

—— — *The Classical Heritage in Islam*, London 1975

SCHMUCKER, W. — *Die pfanzliche und mineralische Materia Medica im Firdaus al-ḥikma des Ṭabarī*, (=*Bonner Oientalistische Studien* 18), Bonn 1969 (Abl.: SCHMUCKER *Mat. Med.*)

SEZGIN, F. — *Geschichte des Arabischen Schifttums*, Band III: *Medizin – Pharmazie, Zoologie – Tierheilkunde*, Leiden 1970 (abbr.: *GAS* III)

SIGGEL, A. — *Arabisch-Deutsches Wörterbuch der Stoffe aus den drei Naturreichen*, Berlin 1950 (abbr.: SIGGEL *WB*)

SODEN, W. VON — *Akkadisches Handwörterbuch*, voll. 1-3, Wiesbaden 1965-81 (abbr. SODEN *AHw*)

STEINSCHNEIDER, M. — *Die hebräischen Übersetzungen des Mittelalters und die Juden als Dolmetscher*, Graz 1956

—— — *Die Arabischen Übersetzungen aus dem Griechischen*, Graz 1960

STROHMAIER, G. — "'Von Alexandrien nach Bagdad' - eine fiktive Schultradition" in: J. WIESNER (Hg.) *Aristoteles, Werk und Wirkung* (Festschrift P. Moraux), New York 1987, Bd. II p. 380-9

TABANELLI, M. — *Studi sulla chirurgia bizantina Paolo di Egina*, Firenze 1964

THIES, H.J. — *Der Diabetestraktat 'Abd al-Laṭīf al-Baġdādī's*, Bonn 1971

ULLMANN , M. — *Die Medizin im Islam*, *HO* 1. Abt. Erg. VI 1, Leiden etc. 1970 (abbr.: ULLMANN *Medizin*)

—— — *Die Natur- und Geheimwissenschaften im Islam HO* 1. Abt. Erg. VI 2, Leiden etc. 1972 (abbr.: ULLMANN *Nat.wiss.*)

—— — "Yūḥannā ibn Sarābiyūn Untersuchungen zur Überlieferungsgeschichte seiner Werke" in: *Medizinhistorisches Journal* VI 4 (1971), p. 278-296 (abbr.: ULLMANN *Ibn Sarābiyūn*)

—— — *Das arabische Nomen generis*, AAWG ph.-hist. 3. Folge Nr. 176, Göttingen 1989, (abbr.: ULLMANN *Nomen Generis*)

—— — *Das Schlangenbuch des Hermes Trismegistos*, Wiesbaden 1994, (abbr.: ULLMANN *Schlangenbuch*)

—— — *Wörterbuch der Klassischen Arabischen Sprache*. Begründet von J. KRÄMER und H. GÄTJE. In Verbindung mit A. SPITALER bearbeitet von M. ULLMANN, vol. 1 ff, Wiesbaden 1957 ff (abbr.: WKAS)

WEISSER, U. — "The Embryology of Yuḥannā ibn Māsawaih" in: *Journal for the History of Arabic Science* 4 (1980), p. 9-22 (abbr. : WEISSER *b. Māsawaih Embryology*)

—— — *Zeugung, Vererbung und pränatale Entwicklung in der Medizin des arabisch-islamischen Mittelalters*, Erlangen 1983

—— — "Yuḥannā ibn Māsawaihs Abhandlung über die Leibesfrucht und ihre Entstehung im Mutterleib" in: ZGAFW 8 (1993), p. 114-131 (abbr. : WEISSER *b. Māsawaih Leibesfrucht*)