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ABSTRACTS

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life for patients. **Conclusion:** Tele-AD is an original and rapidly operational project combining several digital tools already in use in sub-Saharan Africa and well adapted to the context of limited resources countries. If successful, it would make possible a larger access to specialized dermatology care in Africa.

PD8

CLASSIFYING ATOPIC DERMATITIS : CLINICAL PHENOTYPES AND ASSOCIATED CHARACTERISTICS

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Background: Atopic dermatitis(AD) is a common chronic multifactorial disease that can present with different clinical phenotypes although each type shares certain common pathogenic mechanisms. Many attempts have been made to identify clinical phenotypes of AD in order to identify different etiologies and improve diagnosis. **Objective:** This is a pilot study to classify AD into common clinical phenotypes and associated the phenotypes with any clinical characteristics and laboratory findings. **Methods:** Total of 169 AD patients who visited Catholic Medical Center from September to October 2019 were included. Patients more than 18 years old who met Hanifin and Rajka criteria were included. We classified AD into nummular, erythrodermic, typical and prurigo-nodularis-like type. We performed analyses of clinical features of AD, clinical severity, and laboratory test results between clinical phenotypic groups. **Results:** Mean EASI score and total IgE was low in nummular type, but not statistically significant. Eosinophil cationic protein(ECP) was high in typical type and Vit D was low in prurigo-type, but not statistically significant. Antecubital and neck were most prevalent in all phenotypes in case of flexural area, white trunk was most prevalent in non-flexural area. There was no statistical difference of affected areas between types. Pruritus after sweating forehead lichenification, allergic shiner, dirty neck, sandpaper-like skin lesion are statically different between types. **Conclusions:** Clinical characteristics and laboratory findings shows not significant difference between types, and more large scale studies are required.

PD9

THE EPIDEMIOLOGY OF ATOPIC DERMATITIS IN CHILDREN AND ADULTS IN THE UK: A POPULATION-BASED COHORT STUDY USING PRIMARY CARE DATA

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Contemporary estimates of the incidence and prevalence of atopic dermatitis (AD) are lacking. This retrospective, population-based study used the Oxford Royal College of General Practitioners Research and Surveillance Centre database to describe the epidemiology of AD in England. We analyzed primary care records of >3.85 million people, spanning a 10-year period (2009–2018). We identified AD cases by use of a previously validated algorithm. Incidence was defined by the first-ever AD diagnosis recorded in the primary care record. Prevalence of active AD was defined as

2 AD-related primary care records within any 1-year period. Analyses were stratified by age, sex, ethnicity, socioeconomic status, and geography. AD was most frequently identified in infants and children (incidence: 11.9 per 100 person-years [<2y], prevalence: 14.2% [2–6y]). Incidence and prevalence were lowest in mid-adulthood (0.35 per 100 person-years [40–49y] and 2.8% [30–39y] respectively). We observed steadily increasing rates of AD across older age groups, with a second peak in those >80y (incidence: 0.79 per 100 person-years, prevalence: 9.9%). Rates of AD were higher in Asian and Black ethnic groups, even after adjustment for other sociodemographic factors. Higher socioeconomic status (by quintile of Index of Multiple Deprivation) was associated with a higher incidence of AD in infants (IRR 1.06, 95% CI, 1.03–1.09), but the reverse association was seen in children ≥2 years and in adults. We observed a bimodal age distribution of AD. We identified considerable variation by ethnicity and socioeconomic status, varying across life course. These factors must be considered when assessing population health needs.

PD10

CHILDREN WITH ATOPIC ECZEMA EXPERIENCING INCREASED DISEASE SEVERITY IN THE POLLEN SEASON MORE OFTEN HAVE HAY FEVER AT YOUNG AGE AND A DARK SKIN TYPE

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Children with atopic eczema are known to experience seasonal variations in disease severity, with winter being the season in which severity generally increases. There is a lack of knowledge about the subgroup of children that experiences increased severity in spring and summer months. We aimed to investigate which phenotype characteristics best describe children flaring in the pollen season. A retrospective database analysis was conducted, including 110 children with difficult-to-treat atopic eczema aged 0 to 17 years. Relevant outcome parameters were extracted from medical records. In our population, 36% (n=40/110) of children reported flares of atopic eczema in the pollen season. These children were more often sensitized to ≥1 types of pollen (73% (n=29/40) vs. 28% (n=10/36), p<0.0001) and had more patient-reported hay fever (70% (n=28/40) vs. 19% (n=7/36), p<0.0001), compared to children that do not flare in the pollen season. Moreover, children flaring in the pollen season more often had a dark skin type (78% (n=31/40) vs. 44% (n=16/36), p=0.003). Based on stepwise multivariable analyses, children flaring in the pollen season were characterised by the combination of younger age, hay fever and dark skin type (C-statistic: 0.86). In conclusion, patient-reported flares in spring and summer are experienced by one third of children with difficult-to-treat atopic eczema. This phenotype can be characterised as young children having hay fever and a dark skin type and can be identified based on clinical parameters alone without the need to perform IgE blood testing or skin prick tests.

PD11

GLOBAL EPIDEMIOLOGY SURVEY OF PREVALENCE, DISEASE SEVERITY, AND TREATMENT PATTERNS IN ATOPIC DERMATITIS: RESULTS FOR 2 LATIN AMERICAN COUNTRIES

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