

Journal of Glaucoma

Normal tension glaucoma and low cerebrospinal fluid pressure: Reply

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Normal tension glaucoma and low cerebrospinal fluid pressure: Reply

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None of the authors have any financial interest in any product, method or material or lack thereof mentioned in this article.

Journal of Glaucoma – Letter to Editor (Invited reply)

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Dear Editor,

We thank Gallina and co-authors(ref) for their comments relating to our report of normal tension glaucoma occurring prematurely in a 27-year-old male with chronic, recurrent intracranial hypotension.¹ We can report that since the implantation of the ProGAV® cerebrospinal fluid (CSF) shunt, his recurrent left optic disc haemorrhages have not recurred. His intraocular pressures at last review were 15mmHg in the right eye and 14mmHg in the left using Latanoprost 0.005% once at night to each eye. His split-fixation visual field defect in the left eye, reported in our description,¹ has remained unchanged. His symptoms of headache have improved post-operatively, and therefore, intracranial pressure monitoring has not been required, nor has external adjustment of the magnetic valve that forms part of ProGAV® shunt.

We agree that the collective observations in these two cases suggest an association between recurrent optic disc haemorrhages and low CSF pressure which abate when the CSFP is normalised.^{1, 2} In our case, the dual approach of reducing intraocular pressure with use of Latanoprost 0.005% and elevating the CSF pressure with implantation of the ProGAV® cerebrospinal fluid shunt has normalised his translamina cribrosa pressure difference. It is likely that the normalisation of the pressure differential across the lamina cribrosa is the reason that his optic disc haemorrhages have not recurred.

Given the increasing evidence in the literature of the association between low CSF pressure and glaucoma,³⁻⁷ we suggest that patients with known chronic low cerebrospinal fluid pressure are advised to seek an annual examination to check intraocular pressures, visual fields, and for an optic disc examination with an optometrist to detect early normal tension glaucoma.

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