## **COMMENTARY**

## Re: Pentosan polysulfate and a pigmentary maculopathy: causation versus correlation?

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How should a conscientious physician advise patients with Interstitial Cystitis /Bladder Pain Syndrome (IC/BPS) when they want to know if taking Pentosan Polysulfate Sodium (PPS) will lead to loss of vision? Ever since the initial report from Pearce et al in 2018 suggesting that PPS usage can lead to the development of pigmented maculopathy (PM), my patients have been inundated with solicitations from attorneys looking to sign up clients for class action lawsuits.1 While there have been additional reports suggesting a relationship between PPS exposure and the development of PM, Ludwig et al found that there was no difference in the rate of macular disease between patients with documented IC/BPS who had taken PPS and those with IC/BPS with no history of PPS use.<sup>2</sup> The large size of Ludwig's study certainly suggests that PPS may not cause PM to develop, and if the rate of PM in the IC population is higher than in controls, it may be due to the disease itself and not from the medication. In this manuscript, Proctor clearly describes the immune inflammatory response that is responsible for the development of the bladder damage seen with IC/BPS. Also, he describes how

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inflammatory mediators can enter the blood stream and might be a potential cause for the development of PM.<sup>3</sup> This is a thought-provoking hypothesis that demands further evaluation.

I have prescribed PPS since its approval and have many patients who feel it is an essential part of their IC treatment regimen. There is no other prescription medication that functions in the same fashion. I require them to follow the FDA recommendations for annual eye exams to look for PM development. I also advise patients that as they improve, we will discuss dose reduction and even discontinuation if their IC symptoms have abated. By following these suggestions, one should be able to continue to prescribe PPS for appropriate patients while carefully monitoring them for PM. I found this article extremely informative and will refer to it when counseling patients about IC/BPS and PPS.

## References

- Pearce WA, Chen R, Jain N. Pigmentary maculopathy associated with chronic exposure to pentosan polysulfate sodium. Ophthalmology 2018;125(11):1793-1802.
- Ludwig CA, Vail D, Callaway NF et al. Pentosan polysulfate sodium exposure and drug-induced maculopathy in commercially insured patients in the United States. Ophthalmology 2020;127(4):535-543.
- 3. Proctor JG. Pentosan polysulfate and a pigmentary maculopathy: causation versus correlation? *Can J Urol* 2023;30(6):11732-11739.