Haemodialysis can cause an acute rise in intraocular pressure

The Science behind the Tip

Haemodialysis (HD) can reportedly induce a sudden rise in intraocular pressure (IOP) in patients with neovascular (NVG) (1) and pseudo-exfoliative (PXF) glaucoma (2). Medical management includes topical anti-hypertensive medication and acetazolamide or mannitol. Even though prophylactic oral Acetazolamide SR can be given (1), Acetazolamide toxicity should be carefully monitored when prescribed in haemodialysis patients (3). Cycloidiode laser or surgery should be considered.

IOP fluctuations are common in renal diseases and even though the reason is not yet clear, it is postulated that during HD the rate of production of aqueous humor is increased; and as outflow is obstructed in NVG and PXF, IOP rises acutely (4).

References


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