

Response to comments on F. Shaheen et al (*J Pak Med Assoc* 2021 April (4): 1184-1188)

## Incidence of endophthalmitis following intravitreal anti VEGF injections at a tertiary care hospital in Pakistan

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We would like to thank the reader for comments and discussing our article in their journal club. We shall address their concerns one by one.

- 1) We agree that there is recommended protocol and guidelines for intravitreal injections given by the Royal College of Ophthalmologists, UK<sup>1</sup> and similarly given by American Academy of Ophthalmology. However there are differences in them. For example in USA, specialists give injections without sterile gloves and on the other side in UK clinicians are advised to use sterile gloves. Similarly there is no unanimous consensus on postoperative antibiotics drops use and duration. Our statement is appropriate in saying that there is absence of integrated protocol especially in Pakistan.
- 2) We really appreciate for highlighting two more studies from mentioned hospital. Unfortunately both studies were published in a journal that is not indexed on major databases such as Pub Med and EMBASE. We thoroughly searched these search engines and just came across the studies that we already mentioned in our study.
- 3) There is no clinical trial that suggests prophylactic antibiotic is helpful in preventing endophthalmitis.<sup>2</sup> Although it is debatable and there is no clear answer. One of the authors had worked in UK and never prescribed preoperative antibiotics since 2006 both in UK and Pakistan. However we do instill Moxifloxacin eye

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drops while preparing for procedure (few minutes before) and immediately after the procedure according to hospital policy. We don't recommend preoperative antibiotics at home on same day or before. In discussion we didn't say that no antibiotic eye drop was used immediately before procedure. In paragraph 6, it was highlighted that we used post-operative antibiotics but only proven prophylaxis is povidone iodine.<sup>3</sup> This point was mentioned in context of use in Pakistani population.

- 4) Intravitreal injection dose is 0.05 ml that is unlikely to raise intraocular pressure (IOP). There is no recommendation in any guidelines that makes it compulsory to check IOP.<sup>1</sup> However in the patients with glaucoma, IOP should be checked. Regarding our study we did IOP check before and after the procedure in all patients with air puff tonometer. It is better not to check IOP with applanation tonometer as it may contaminate the eye if tip is not sterilised.

### References

1. The Royal College of Ophthalmologists. Intravitreal injection therapy. Available at <https://www.rcophth.ac.uk/wp-content/uploads/2018/02/Intravitreal-Injection-Therapy-August-2018-2.pdf>. August 2018.
2. Lau PE, Jenkins KS, Layton CJ. Current Evidence for the Prevention of Endophthalmitis in Anti-VEGF Intravitreal Injections. *J Ophthalmol*. 2018; 2018:8567912.
3. Shaheen F, Awan MA, Hafeez A et al. Incidence of endophthalmitis following intravitreal anti VEGF injections at a tertiary care hospital in Pakistan. *J Pak Med Assoc* 2021; 71:1184-8.