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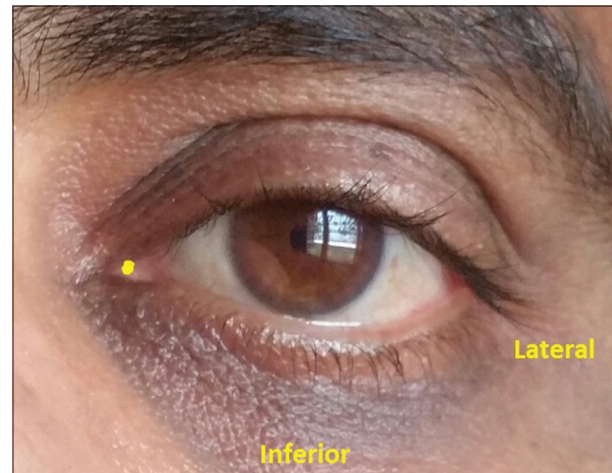


## Should single medial canthus injection be the default option for peribulbar blocks?

Sir,

The report by Sinha *et al.* highlights yet another rare but serious complication secondary to globe perforation (GP) from a peribulbar block (PB).<sup>[1]</sup> GP from PB has invariably involved injections through the infratemporal or superonasal routes.<sup>[2]</sup> The infratemporal injection also indirectly contributes to GP when a second injection is done.<sup>[3]</sup> Due to small amount of free space in the orbit, the globe is displaced medially by the volume of the infratemporal injection done first. This puts the globe in the path of the needle of the second injection done through the medial canthus or superonasal route.<sup>[3]</sup>

Considering that half of the GP go unrecognised at the time of block and its consequences to the individual patient lead to significant visual loss, any reduction in its incidence will be a huge benefit.<sup>[2]</sup> One easy way to achieve this is to make single medial canthus injection the default option for a PB. This approach was first described by Brahma *et al.*<sup>[4]</sup> A maximum of 10 ml of local anaesthetic is injected using a 25G 25-mm needle in the medial canthus [Figure 1]. The choice of local anaesthetic depends on the duration of procedure with 2% lignocaine for short procedures and up to 0.75% bupivacaine or ropivacaine for longer procedures. The injection is extraconal and medial to the medial rectus muscle [Figure 2]. This route is equally effective in comparison to double-injection technique as also with a short 15-mm needle.<sup>[5]</sup> The indications for this approach are no different from that with infratemporal PB. On the infrequent occasion, the block effect is insufficient; the surgeon can easily do a sub-Tenon space local anaesthetic infiltration. The learning curve for single medial canthus injection PB is short making it an easy technique to learn. It



**Figure 1:** The spot shows the site of injection and entry point in the eye

should make GP a very rare if not a ‘never event’. It would be ideal if a randomised controlled trial is performed comparing the medial injection technique with infratemporal PB. As the reported incidence of GP in PB is low (2.23/10,000), the number of patients required to detect a significant difference will be very large making a trial of this kind very challenging.<sup>[6]</sup>

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Nil.

### Conflicts of interest

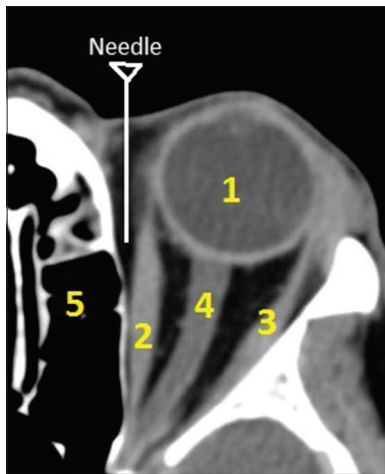
There are no conflicts of interest.

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**Figure 2:** Cross section of orbit showing the extraconal needle location between the medial rectus and the medial wall of orbit. The needle is directed posteriorly from point of insertion. 1 – Globe, 2 – Medial rectus, 3 – Lateral rectus, 4 – Optic nerve, 5 – Ethmoid sinus

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