

## Effective and cost-saving incisionless sub-Tenon's block

Sir,

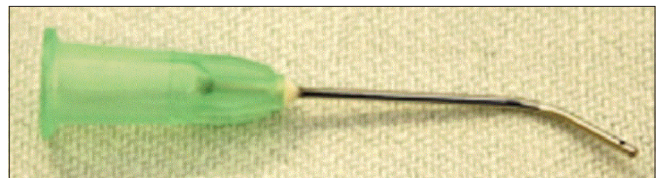
The sub-Tenon's block is commonly used for providing anaesthesia and akinesia during ophthalmic surgery due to the reduced risk of complications as compared to needle-based blocks.<sup>[1]</sup>

Traditional approach involves making a conjunctival incision with blunt forceps and sprung Westcott scissors 5–8 mm away from the limbus, followed by insertion of disposable 19-gauge single-use rigid metal cannula into the sub-Tenon's space.<sup>[1,2]</sup> Despite being safer than the needle-based blocks<sup>[3]</sup>, conjunctival haemorrhage occurs and the technique is relatively expensive (approximately 10 USD for single-use 19-gauge sub-Tenon's cannula and additional cost of sterilisation of scissors and forceps).

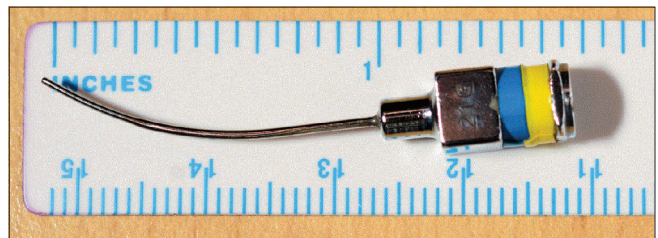
Allman *et al.*<sup>[4,5]</sup> described an incisionless sub-Tenon's block without prior conjunctival incision using a 21-gauge, 25 mm, angled and blunt pencil point disposable triport sub-Tenon's cannula [Figure 1] (much more expensive than routinely used disposable sub-Tenon's cannula). We use the incisionless technique using 21-gauge, 25 mm, angled, metal and re-sterilisable sub-Tenon's cannula [Figure 2]. The conjunctiva is anaesthetised with topical anaesthetic drops and a lid speculum is inserted. The patient is asked to look up and

out and a small tent of conjunctiva is elevated using blunt forceps (Moorfields) in the inferonasal quadrant 5–8 mm away from the limbus. Without making any prior incision, the reusable cannula is inserted directly through the conjunctiva (lateral to the globe) and then rotated to follow the contour of the globe and a desired volume of local anaesthetic agent is injected.

We have used the reusable sub-Tenon's cannula in more than 450 patients over 1 year without any injury and known complications with the added advantage of reduced conjunctival haemorrhage, which is frequently associated with standard sub-Tenon's block.<sup>[3]</sup> The cost-savings of this incision-less technique would also take account of obviating the need of sterilising



**Figure 1:** Modified from Lin *et al* 21-gauge, 25.4 cm long (1 inch), angled triport sub-Tenon's curved metal disposable cannula



**Figure 2:** Original reusable 21-gauge, 25.4 cm long (1 inch), curved metal cannula for incisionless sub-Tenon's block

the scissors, but one has to consider the initial cost of metal sub-Tenon's cannula.

Incisionless sub-Tenon's block can be made affordable using reusable 21-gauge metal cannula and is an effective alternative to needle-based blocks, which may be adopted in countries where reusable equipment use may not be prohibitive.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**Chandra M Kumar, Edwin Seet**

Department of Anaesthesia, Khoo Teck Puat Hospital,  
Yishun Central 90, 768828 Singapore

**Address for correspondence:**

Prof. Chandra M Kumar,  
Department of Anaesthesia, Khoo Teck Puat Hospital,  
Yishun Central 90, 768828 Singapore.  
E-mail: kumar.chandra.mohan@alexandrahealth.com.sg

**REFERENCES**

1. Roman SJ, Chong Sit DA, Boureau CM, Auclin FX, Ullern MM. Sub-Tenon's anaesthesia: An efficient and safe technique. Br J

Ophthalmol 1997;81:673-6.  
2. Kumar CM, Dodds C. Sub-Tenon's anesthesia. Ophthalmol Clin North Am 2006;19:209-19.  
3. Kumar CM, Eid H, Dodds C. Sub-Tenon's anaesthesia: Complications and their prevention. Eye (Lond) 2011;25:694-703.  
4. Allman KG, Theron AD, Byles DB. A new technique of incisionless minimally invasive Sub-Tenon's anaesthesia. Anaesthesia 2008;63:782-3.  
5. Lin S, Ling RH, Allman KG. Real-time visualisation of anaesthetic fluid localisation following incisionless Sub-Tenon block. Eye (Lond) 2014;28:497-8.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
Quick response code	Website: www.ijaweb.org
	DOI: 10.4103/0019-5049.198394

**How to cite this article:** Kumar CM, Seet E. Effective and cost-saving incisionless sub-Tenon's block. Indian J Anaesth 2017;61:84-5.  
© 2017 Indian Journal of Anaesthesia | Published by Wolters Kluwer - Medknow