Letters to Editor

The use of corneal blade in hand surgery

Sir,

We the authors describe a simple method of using a 45° angled corneal knife for the release of intrinsic muscle and flexor pulley reconstruction.

Corneal knives (ophthalmological microsurgical knife, also called crescent knife) [Figure 1c] (Optiedge India, Ahmedabad), commonly used by ophthalmic surgeons, have sharp edges, straight sides and rounded tips. Moreover, they come in different widths starting from 1.2 to 2.8 mm. Surgeons can take advantage of the shape, size and the angulation of the corneal knife (a convenient angle of 45° to the handle) to manoeuvre the knife safely for the intended purpose. The corneal knife has three cutting sides merged into a round margin with 10 mm length of the cutting blade. We used the corneal knife for a total and atraumatic release of contracted intrinsic muscles of hand in a post-traumatic intrinsic contracture with good results [Figure 1]. This length is ideal enough to ensure the release intraoperatively, as the surgeon can visualise the cutting end of the blade on the other side of the metacarpal bone across the entire anterior aspect of the metacarpal bone [Figure 1]. In another case, the same knife has been used to create a space for smooth passage of graft material in the case of A2 pulley reconstruction in secondary flexor tendon grafting [Figure 2].

We the authors suggest that a simple technical modification using the corneal knife may be employed in bringing about complete release of interossei muscle and pulley reconstruction in making the surgical procedure easy in an anatomically constrained space.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Figure 1: Pre-operative image showing fixed flexion deformity at the metacarpophalangeal joint due to the intrinsic contracture (a) and full flexion of the fingers (b). Ophthalmic microsurgical knife (c). Intraoperative image showing the use of corneal knife for intrinsic release (d). Post-operative image showing adequate correction in extension (e) without loss of flexion (f)
Conflicts of interest
There are no conflicts of interest.

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