

Posterior Medial Canthal Thermoplasty

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Purpose: To describe a new, simple, quick and minimally invasive surgical technique for managing medial canthal tendon (MCT) laxity.

Methods: The technique works by creating a directed posterior lamellar scar. Sutures are pre-placed in firm medial canthal tissue, a triangular diathermy burn is made between this fixation point and the medial tarsal plate (sparing the canaliculus). This area is then plicated horizontally by bringing the pre-placed sutures through the medial tarsal plate. We report a retrospective case note review of a consecutive case series of 83 patients (88 procedures). All patients with moderate to severe MCT laxity underwent a medial thermoplasty procedure in addition to standard surgery for correcting their eyelid malpositions (entropion, ectropion or symptomatic lax eyelids).

Results: The study cohort included 43 males and 40 females, with a mean age of 71 years (range= 51 to 95). Epiphora was the commonest presenting complaint (52%) followed by ocular irritation (46%) with the remainder heaving a combination of symptoms. Lower lid ectropion (n=45, 51%) and entropion (n=39, 44%), constituted the most common indications for surgery.

The average postoperative follow-up period was 11 months (range 2 weeks to 63 months). 81 eyes (92%) had complete resolution of symptoms, while three (3.4%) had partial reduction of epiphora. With regards to the eyelid margin position, 79 eyelids (90%) were anatomically in a normal position, whilst one had residual medial ectropion. No documentation could be found in 4 cases (4.5%). Three operations (3.4%) failed despite early satisfactory results. In terms of correction of MCT laxity, 78 cases (89%) were deemed successful. At the time of last examination, 76(86%) were found to have firm medial canthal tendon attachment. Of the remainder, 6 cases (7%) had moderate laxity (grade 2) and 2(2%) had severe laxity. No post-operative data were available in 4 cases (4.5%). There were no major complications, nor any significant long-term sequelae.

Conclusion: Posterior Medial Canthal Thermoplasty provides a simple, effective and safe option for addressing medial canthal tendon laxity.