New Techniques for Surgical Decompression of Thyroid-related Orbitopathy

S M Graham,* MBBS(Hons), FRACS, L Chee,** FAMS, MBBS, FRCS(Edin), M A Alford,*** MD, K D Carter,**** MD, FACS

Abstract

Certain cases of thyroid-related orbitopathy may require surgical decompression of the orbit. The purpose of this paper is to highlight new techniques of orbital decompression in thyroid-related orbitopathy. We present two illustrative cases selected from our recent surgical experience. The techniques of combined-approach decompression, transcaruncular approach to the medial orbital wall, drilling reduction of the greater wing of sphenoid and lateral wall lag-screw fixation after lateralization by greenstick fracture are presented. The relative utility of each technique is examined. These techniques expand the surgical repertoire for this condition and allow individualization of treatment for a specific patient’s needs.

Key words: Orbital decompression, Thyroid-related orbitopathy

* Associate Professor
** Fellow
  Division of Head and Neck Surgery
  Department of Otolaryngology-Head and Neck Surgery
*** Fellow
**** Associate Fellow
  Oculoplastic Orbit and Oncology Service
  Department of Ophthalmology

University of Iowa, Iowa City, Iowa, USA

Address for Reprints: Dr Scott M Graham, University of Iowa Hospitals and Clinics, Department of Otolaryngology-Head and Neck Surgery, 200 Hawkins Drive, E230 GH, Iowa City, Iowa 52242, USA.