Managing primary, secondary and tertiary uveitis and scleritis

Michael Del Giodice
Outlook Eye Care, USA

Whether you are practicing in a referral-based clinic, primary-care office, or commercial setting, we will all encounter patients with uveitis. There are a wealth of articles, studies, and lectures on how to diagnose, treat, and manage uveitis. Instead of reiterating the typical discussion of uveitis, we present a few not-so-common pointers that will greatly enhance your ability to manage this disorder. This course is largely case-based and will be presented in a grand rounds fashion. The attendee will learn novice and advanced techniques employed in the management of common and some uncommon causes of uveitis and scleritis. In addition, the participant will learn which cases require laboratory testing and imaging, and when to use oral medications.

Intraoperative corneal thickness changes during pulsed accelerated corneal cross linking using isotonic riboflavin with HPMC

Nihal Abdel Fatah Elghryany1, Yehia M Salah El-Din1, Ahmed M Sherif1, Lamiaa S Aly1, Amr A Osman1, Michael A Grentzelos2 and George D Kymionis1,3

1Cairo University, Egypt
2University of Crete, Greece
3University of Miami, USA

Purpose: To evaluate corneal thickness changes during pulsed accelerated corneal crosslinking (CXL) for keratoconus using a new isotonic riboflavin formula.

Setting: EyeCare Center, Maadi, Cairo

Methods: In this prospective, interventional, clinical study patients with grade 1-2 keratoconus (Amsler-Krumeich classification) underwent pulsed accelerated (30mW/cm²) CXL after application of an isotonic riboflavin solution (0.1%) with HPMC for 10 minutes. Central corneal thickness (CCT) measurements were taken using ultrasound pachymetry before and after epithelial removal, after riboflavin soaking and immediately after completion of UV A treatment.

Results: Twenty eyes of 11 patients (4 male, 7 female) were enrolled. Mean patient age was 26±3 (range from 18 to 30 years). No intra-operative or postoperative complications were observed in any of the patients. Mean CCT was 507±35μm (range 559-459μm) before and 475±40μm (range 535-420μm) after epithelial removal (P<0.001). After 10 minutes of riboflavin instillation, there was a statistically significant decrease of CCT by 6.2% from 475±40μm (range 535-420μm) to 446±31μm (range 508-400) (P<0.005). There was no other statistically significant change of CCT during UV A irradiation.

Conclusions: A significant decrease of corneal thickness was demonstrated during the isotonic riboflavin with HPMC application while there was no significant change during the pulsed accelerated UVA irradiation.