Neuro-ophthalmic series part 1: Managing the diplopic patient

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Whether you are practicing in a referral-based clinic, primary-care office, or commercial setting, we will all encounter patients with diplopia. There are a wealth of articles, studies, and lectures on how to diagnose and manage diplopia. We present a review of the most common ocular motor cranial neuropathies and internuclear ophthalmoplegia. This course is largely case-based and will be presented in a grand rounds fashion. The attendee will learn novice and advanced in-office techniques for identifying the cranial nerves palsies, well as internuclear ophthalmoplegia. In addition, the participant will learn which cases require laboratory testing and imaging and which cases require emergent referral.

Phacoemulsification in pseudoexfoliation (XFL)

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Eyes with (XFS) Pseudoexfoliation frequently have glaucoma and several other characteristics that impact surgery such as poor pupillary dilatation, zonular weakness, shallow anterior chamber etc., therefore it is not surprising that the prevalence of intra-operative complications is significantly higher than in routine cataract surgery. Cataract surgery in XFS presents challenges that require careful preoperative planning and intra-operative care to ensure successful and safe surgery. The use of specialized adjunctive devices such as highly cohesive visco-elastics, pupillary expansion devices and capsular tension devices has increased the margin of safety in these potentially complex cataract surgeries. Inadequate response to topical mydriatics is almost a rule and the use of Non-stereoidal anti inflammatory agent few days before surgery helps. Use of intracameral epinephrine before injecting viscoelastic might also augment pupillary dilatation. However other maneuvers like bimanual stretching, iris hooks or pupil expanding rings may be required to have a pupillary size for adequate capsulorhexis. Suspicition of zonular weakness as a rule means readiness to confront it. Marked lens subluxation signs like phacodonesis, lens subluxation and iridodonesis have to be looked for preoperatively. Presence of gap between the iris border and the lens, evidence of decentration of the lens nucleus, changes in the contour of peripheral lens etc shoulds alert the surgeon to a possibility of zonular weakness. To perforate the anterior capsule at the beginning of the capsulorhexis a sharp instrument should be used since zonular weakness results in less anterior capsular tension and reduced resistance which makes the initial puncture more difficult. If necessary counterpressure could be additionally exerted using a needle or chopper. The capsulorhexis size may be restricted to an under optimal size due to inadequate pupil in case pupil expanders are not used, leading to higher possibility of capsular contraction syndrome. The use of CTR (Capsular Tension Ring) has greatly reduced the intra and post operative complications such as zonular dehiscence, vitreous loss and capsular contraction. When capsular contraction syndrome is treated with relaxing YAG laser relaxing capsulotomies early, the result is gratifying. In glaucomatous patients combined cataract and glaucoma surgery decreases the incidence of an acute postoperative rise in IOP and may improve long-term control. XPS eyes show more inflammation as compared to normal eyes and the surgeon should be aware of this fact post operatively. Long term follow up is required, for glaucoma screening and follow up and stability of the bag.