۳۰ درصد تخفیف نوروزی ویژه کارگاه‌ها و فیلم‌های آموزشی

- اصول تنظیم قراردادها
- پروپوزال نویسی
- آموزش مهارت‌های کاربردی در تدوین و چاپ مقاله

بش
Management for pediatric cataracts should be individualized and requires experienced teamwork. Most cases of congenital cataracts are familial or idiopathic; only rarely are they associated with metabolic disorders or ocular abnormalities. The time and method of treatment are of crucial importance for visual rehabilitation. Cataract surgery is indicated when the opacity significantly obscures the visual axis. The pediatric eye is not simply a miniaturized adult eye, surgery should be performed by an experienced surgeon and the postoperative course needs to be monitored carefully. Postoperatively, proliferation of lens epithelial cells (LECs) increases the incidence of posterior capsule opacification (PCO) and the elastic iris predisposes to iridocorneal adhesions (ICA), iris capture, pupil irregularity and intraocular lens (IOL) decentration.

With improvements in surgical techniques, and IOL composition and design, outcomes of pediatric cataract surgery have been dramatically improved; however certain points particular to pediatric eyes still need to be emphasized. The most frequent and significant problem following pediatric cataract surgery is PCO; the younger the child, the higher the incidence and the earlier the onset of PCO. Primary posterior capsule removal during surgery, preferably with posterior continuous curvilinear capsulorrhexis (PCCC), is mandatory in children aged 7 years or less, but in my experience the posterior capsule should be removed up to the age of 12 years. Removing the posterior capsule alone does not guarantee a clear visual axis; the anterior vitreous face in young children is reactive and acts as a scaffold for LECs and metaplastic cells resulting in visual axis opacification, therefore vitrectomy (Vitx) is mandatory in infants and young children. IOL capture through the PCCC without Vitx cannot prevent media opacification and therefore has become less popular among pediatric surgeons. Therefore the preferred surgical procedure for pediatric cataracts consists of lensctomy (Lensx), posterior capsulectomy and anterior Vitx with or without IOL implantation which may be performed via an anterior or posterior approach.

Primary IOL implantation is generally considered the standard of care in children older than 2 years with isolated congenital cataracts, however it is of questionable safety in children younger than 2 years due to severe fibrin reaction and media opacification. IOL implantation is contraindicated altogether in microphthalmia, persistent hyperplastic primary vitreous (PHPV) with other ocular abnormalities and active juvenile rheumatoid arthritis. Formerly most IOLs were one-piece polymethylmethacrylate (PMMA) and were associated with complications such as decentration, posterior synechiae (PS) and peripheral anterior synechiae (PAS) formation, pigment precipitation and IOL optic capture, mostly due to bag-sulcus or sulcus fixation. With the advent of new ophthalmic viscosurgical devices, anterior continuous curvilinear capsulorrhexis and PCCC, in the bag IOL implantation, especially with foldable acrylic lenses has become a routine procedure in pediatric cataract surgery. The AcrySof IOL (Alcon Laboratories, Fort Worth, Texas, USA) has been demonstrated to maintain good centration with minimal inflammation and fits well within small capsular bags.

Several studies have revealed the superiority of hydrophobic acrylic over PMMA IOLs in pediatric subjects, but to the best of my knowledge no study has compared hydrophilic acrylic IOLs with PMMA. In this issue, Panahi and coworkers compare hydrophilic acrylic versus PMMA lenses in 40 eyes of 31 children aged 1.
to 6 years. Postoperatively, uveitis, ICA, PS and pigment deposition were less frequent in the hydrophilic acrylic group as compared to the PMMA group. The IOL of choice in pediatric cataract surgery is the hydrophobic acrylic lens. Hydrophilic IOLs are smaller in diameter as compared to hydrophobic counterparts and do not accommodate the capsular bag as well as hydrophobic lenses. Furthermore, adherence to anterior and posterior capsule is less marked as compared to hydrophobic lenses, thereby increasing the chance of decenteration and anterior capsule opacification.

REFERENCES

30 درصد تخفیف نوروزی ویژه کارگاه‌ها و فیلم‌های آموزشی

اصول تنظیم قراردادها

پروپوزال نویسی

آموزش مهارت های کاربردی در ندوین و چاب مقاوم