Customising surgical glaucoma treatment to the patient and their disease: An instruction course

Surgical Glaucoma management has evolved considerably in recent times. The safety and efficacy of augmented trabeculectomy has increased significantly due to optimisation of the techniques but it still remains a surgery with potential risks, potential of failure over time and more so in certain conditions. Although augmented glaucoma filtration surgery remains the gold standard surgical treatment for most of the patients with uncontrolled glaucoma, there has been a significant increase in the array of options available. Glaucoma drainage device surgery has become safer with refinement of the techniques and is being used more widely and in some conditions they may be used as primary surgical treatment. Modern angle surgery including has provided minimally invasive options in specific situations and MIGS (Minimally invasive glaucoma surgery) have proved to be useful in avoiding the need of more invasive glaucoma filtration surgery. There is increasing use of trabecuoplasty with increased popularity of selective laser trabeculoplasty (SLT) and the refinement of technique of diode laser cycloablation has improved its safety and expanded its indications. Non penetrating surgery may provide an alternative and safer solution in certain situations. There are strong proponents of different types of treatments but each treatment modality has its own risks and benefits and one modality does not fit all uncontrolled glaucoma patients. The optimum treatment depends on number of factors. Disease factors include the type of glaucoma, stages of the disease, level of intraocular pressure (IOP) and the desired target pressure and previously used treatments. Patient factors including age and expected life span, occupation, patients expectation from treatment and their ability and compliance for the necessary post operative management and their ability to afford the treatment or series of treatments. Associated factors like ocular surface disease and atopy influence the outcome of certain modalities more than the other while presence of coexisting conditions like cataract may influence the first choice of treatment by allowing a less invasive treatment. Phacoemulsification and goniosynechialysis in a patient with recent attack of angle closure may be a very useful option before considering trabeculectomy or phacoemulsification and iStent in patient with symptomatic cataract and moderate glaucoma and moderately raised IOP may help avoid or delay need of glaucoma filtration surgery. Whereas at the same time coexistence of a cataract may make the choice difficult in conditions like uncontrolled IOP and advanced cataract in the only eye where prioritization of one over the other may be sometimes difficult and combination surgery may carry a higher risk and a lower success rate. Trabeculectomy would be the treatment of choice when a large reduction on intraocular pressure is required in an advanced glaucoma case or when an ultra low target pressure is required. A glaucoma drainage device may be the best option in a case of iridocorneal endothelial syndrome and uncontrolled glaucoma or case of repeated failures of trabeculectomy.

Biography
Atul Bansal is a consultant ophthalmic surgeon with special interest in modern glaucoma and cataract surgery based at University Hospital Coventry & Warwickshire (UHCW). He has extensively including specialist training in Oxford region, advanced specialist training from Birmingham and a clinical and surgical fellowship from Manchester Eye Hospital. He was awarded Birmingham Eye Foundation Roper-Hall Prize Medal in 2004. He specializes in advanced surgical techniques for glaucoma including modern Trabeculectomy, glaucoma drainage implant (Tube surgery), minimally invasive glaucoma surgery (iStent), and lasers and also in complex cataract surgery. He is an author of 15 indexed peer reviewed publications, an MD thesis and chapters in a book on cataract surgery in difficult situations. He has been regularly presented at international and national meetings. He has chaired instruction course on glaucoma management and has been an invited speaker and faculty. He has been principal investigator for multicenter clinical trials. He was the lead for Quality assurance for postgraduate training for School of Ophthalmology, West Midlands, UK and also for post graduate medical education and College Tutor for Royal College of Ophthalmologist for UHCW. He is the departmental lead for Clinical Governance, and clinical audit and cataract service for his department.

bansalatul@yahoo.com