Glaucoma filtration surgery was previously performed when patients had uncontrolled intraocular pressures on maximally tolerated medical treatment, or after failed laser trabeculoplasty. The main reasons for delaying surgery were the risk of post-operative complications associated with standard trabeculectomy procedures and high failure rates for operations in certain sub-groups of glaucoma patients. Technical modifications to the trabeculectomy procedure including adjustable suture techniques combined with the use and techniques of applying powerful antimetabolites now enable the surgeon to have much greater control of both the operation and post-operative scarring.

In association with Professor Peng Tee Khaw of Moorfields Eye Hospital London, Duckworth and Kent has produced a complete set of instruments for an approach in glaucoma surgery known as the Safer Surgery System.

This technique has been developed with the intention of improving consistency in glaucoma surgery. The use of potent anti-proliferative agents such as Mitomycin-C (MMC) during trabeculectomy increases the risk of potential complications, including hypotony, visual loss, uncomfortable blebs and leaking blebs that may lead to endophthalmitis. The Safer Surgery System is designed to preserve visual acuity by minimizing hypotony and bleb-related complications whilst achieving a desirable postoperative intraocular pressure.

A video demonstrating the procedure can be found at: www.duckworth-and-kent.com/videos

Mitomycin-C is not FDA licensed for use in glaucoma surgery

**2-502N Khaw Transconjunctival Adjustable Suture Control Forceps**

- 5.0mm highly polished tying platforms with a flared tip
- For massaging and adjusting intraocular pressure to desired level
- Adjustable Suture Control technique
- Straight shafts
- Standard handle, length 85mm

Tying the adjustable suture

The scleral flap adjustable sutures allow the tension to be adjusted post operatively through the conjunctiva with specially designed forceps with very smooth edges. The adjustable suture system allows a gradual titration of the intraocular pressure – more gradual than that seen with suture removal or massage. The video by Prof. P T Khaw demonstrating the tying of this adjustable suture is available at www.duckworth-and-kent.com/videos
2-686 Khaw Small Conjunctival Clamp

- Interlocking jaw design
- Tip width 4.0mm
- Single handed action
- Overall length 74.5mm

The Khaw Conjunctival Clamp (2-686 shown above) holds back and protects the conjunctival edge during antimetabolite application. Extremely useful during fornix based conjunctival incisions.

2-687 Khaw Large Conjunctival Clamp

- Interlocking jaw design
- Tip width 12.0mm
- Single handed action
- Overall length 74.5mm

Khaw Glaucoma Surgery Speculum has a central indent and side notch to achieve maximal exposure for glaucoma surgery and minimize pressure on eye.
**7-101 Khaw Descemet Membrane Punch**

- Designed to punch 0.75mm x 0.5mm
- Particularly suited when small sclerostomy required (e.g. thin sclera, small scleral flap)
- Punch action can be repeated to create larger sclerostomy
- Can be used with a short scleral tunnel incision
- Squeeze action handle activates shaft to punch

Khaw Small Descemet Membrane Punch (7-101) is particularly suited when small sclerostomy required (e.g. thin sclera, small scleral flap)

**7-102 Khaw Descemet Membrane Punch**

- Designed to punch 0.5mm x 0.3mm
- Can be used with a short scleral tunnel incision
- Squeeze action handle activates shaft to punch
- Round squeeze handle, length 131mm

**Additional Descemet Membrane Punches**

**7-105 DK Descemet Membrane Punch**

- Designed to punch 0.7mm x 1.2mm
- Squeeze action handle activates shaft to punch
- Round squeeze handle, length 131mm

**7-106 Jacobs Descemet Membrane Punch**

- Designed to punch 1.2mm x 0.85mm
- Squeeze action activates shaft to punch
- Round squeeze handle, length 131mm

Chisel profile of leading edge allows easy entry into the scleral tunnel. Angled blade profile allows secure engagement of deep anterior tunnel edge.
8-616 Ogawa Infusion Cannula

- 20 gauge, thin wall, 0.9mm diameter x 4.0mm length
- Straight shaft, 45° bevelled tip
- Grooves in cannula body ensure non-traumatic securing of cannula
- Silicone tubing and luer fitting supplied

Controlled Fluid Flow, positive pressure infusion where necessary

4-610 DK Retractable Diamond Knife, 25° Single Edge

- 0.5mm wide 25° single edge diamond
- Retractable long handle
- Length 123.5mm

Designed for delicate dissection of tissue

6-608 DK Scleral Pocket Knife

- 1.0mm x 1.0mm oval round blade, blade thickness 0.1mm
- 45° angled shaft, tip to angle length 3.0mm
- Round handle, length 118mm

3-205 DK Needle Holder (curved)

- 7.0mm delicate curved jaws
- Round handle, tag spring
- Length 107mm

1-510 Westcott Style Tenotomy Scissors (curved)

- Blunt tips, curved blades
- Cut length 12.0mm, blade length 20.0mm
- Standard handle, length 116mm