

Trabecular Micro-Bypass Glaucoma Stent Surgery

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Glaukos iStent® Trabecular Micro-Bypass overview

The iStent is the first internal micro-bypass implant for the treatment of primary open-angle glaucoma. The iStent is CE marked and available for use in select countries in Europe. In Canada, the iStent was recently approved for use. The iStent is custom designed for optimal fit and retention within Schlemm's canal. The device is made of surgical grade non-ferromagnetic titanium, weighs 60 µg with a snorkel bore diameter of 120 µm, and has measurements of 0.5 mm x 0.25 mm x 1.0 mm.



Measuring approximately 1 mm in length, the iStent is the smallest medical device ever implanted into the human body.

Target Patient Groups

Patients with primary open-angle glaucoma:

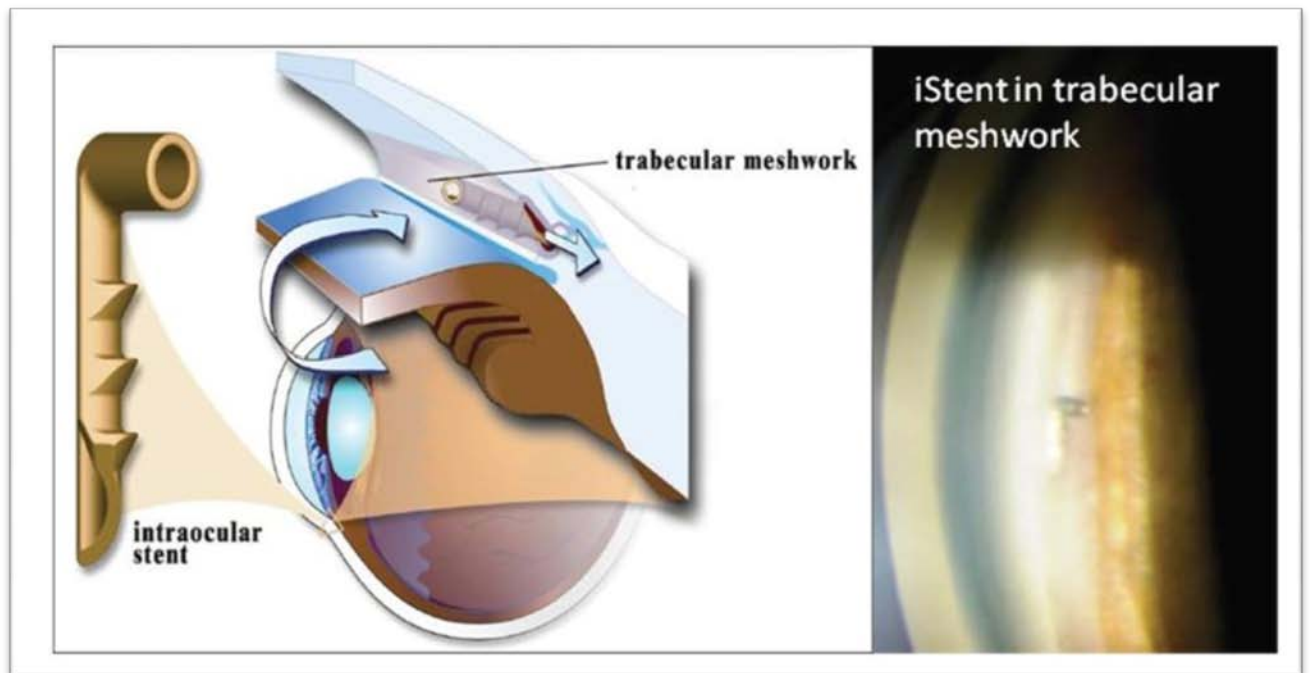
- Patients with uncontrolled intra-ocular pressures
- Patients experiencing side effects from medication
- Patients whose quality of life is impaired with glaucoma treatment
- Patients with compliance problems

Mechanism of action

Elevated or uncontrolled IOP is the number one risk factor for glaucoma. The primary cause of elevated eye pressure in patients with primary open-angle glaucoma is abnormality of the trabecular meshwork which creates resistance to outflow and back-up of aqueous humour. Up to 75% of resistance to outflow is located in the trabecular meshwork.

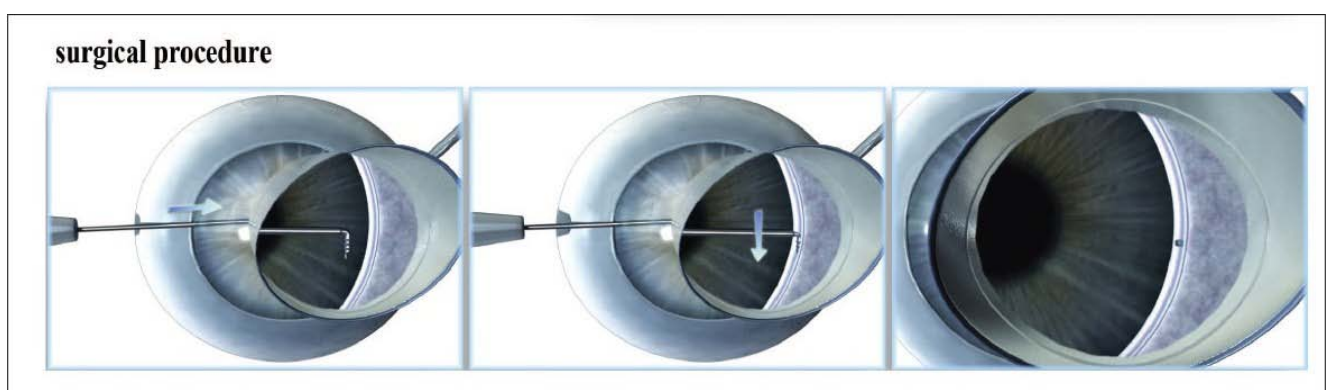
Implantation of the iStent bypasses the trabecular meshwork and is placed in Schlemm's canal near the lower nasal quadrants. The lower nasal quadrants have a large presence of

collector channels. The iStent creates a patent bypass through the trabecular meshwork and into Schlemm's canal; thereby re-establishing physiological outflow.



Surgical Procedure

The iStent is inserted using a microsurgical technique in an operating theatre through a self-sealing micro-incision wound (1-1.5mm) and with the iStent positioned using a custom made gonioscopic prism to visualise the trabecular meshwork. The procedure takes 20-30 minutes and is minimally invasive. Postoperatively anti-inflammatory and antibiotic eye-drops are used for 2 weeks. The operation can be combined with cataract surgery and custom intra-ocular lens insertion.



Suitability and Assessment

Please contact Cathedral Eye Clinic (Mr. Colin Willoughby: drcolinwilloughby@googlemail.com) to arrange a consultation and clinical examination to assess your suitability for Trabecular Micro-Bypass Glaucoma Stent Surgery or to avail of our range of glaucoma services.