

Membrane-tube shunt device can reduce intraocular pressure

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(HealthDay)—Glaucoma surgery using a novel membrane-tube (MT)

type glaucoma shunt device (MicroMT) can safely reduce intraocular pressure (IOP), according to a study published online May 3 in *Clinical & Experimental Ophthalmology*.

Byung Heon Ahn, M.D., from Konyang University in South Korea, and colleagues conducted a retrospective, noncomparative, interventional case series to examine IOP changes and complications associated with MicroMT implantation. The MicroMT, which consists of an expanded polytetrafluoroethylene membrane and a silicon tube with an intraluminal stent, was implanted in 43 glaucomatous eyes with insufficient IOP control despite receipt of medical treatment.

The researchers found that there was a decrease in mean IOP, from a preoperative value of 22.5 mmHg to 11.1 mmHg at three years after surgery (50.7 percent reduction). An additional 40.2 percent IOP reduction was seen with intraluminal stent removal four weeks after the operation. At three years after the operation, the success rate was 89.5 percent when success was defined as an IOP between 6 and 21 mmHg and an IOP reduction of ≥ 20 percent from baseline. There were no cases of postoperative ocular hypotony or tube-related complications.

"MicroMT implantation is a novel therapy that may reduce IOP safely and effectively, with no apparent risk of postoperative ocular hypotony," the authors write. "Glaucoma surgery using this device may be a good alternative to conventional [glaucoma surgery](#)."

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