Researchers at the University of South Florida have developed a method of assessing intraocular fluid spaces while minimally damaging the eye, giving the subject freedom of eye rotation and movement.

Treatment of diseases within the intraocular fluid space (the fluid that fills the eye) is a difficult task. Several methods exist including ophthalmic drugs such as eye drops or ointments, hypodermic needles, and tube shunts which are tubes placed directly into the surface of the eye. Ophthalmic drugs, while useful, are cleared by the tear ducts and only a small fraction of the administered drug makes it into the drug target within the eye. Hypodermic needles work for treatment within the intraocular fluid space, but are unsuitable for long term access and treatment.

Our researchers have developed a technique for implanting a cannula that can withstand ever present and changing rotational forces from eye movements and tugging forces. It can then be attached to attachable or implantable devices that are otherwise too large to be attached to the eye, such as infusion pumps or pressure sensors.

**ADVANTAGES:**
- Assess intraocular fluid space without damaging the eye
- Provides free rotation and movement of the eye post procedure
- Less likely to detach from eye than current methods

Robust, reliable, and effective means of assessing intraocular fluid space without damaging the eye.

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