Less is more when treating rare eye condition

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Jaspreet Rayat. Credit: Faculty of Medicine & Dentistry, University of Alberta

New research from the University of Alberta's Faculty of Medicine & Dentistry is showing less is more when it comes to the treatment of optic disc pits¬—a rare eye condition.

"We went back and looked at the different surgeries that we can do to help solve this problem and what worked and what didn't," says Dr. Jaspreet Rayat, lead author of the study and an ophthalmology resident

working at Edmonton's Royal Alexandra Hospital. "What we found is that a lot of surgical techniques that are commonly used are unnecessary and over the top. It's like taking a baseball bat to a nail when a little hammer would do."

Optic disc pits affect about one in every 10,000 people. Patients are born with a deformity in the back of the eye that looks similar to a pit, which allows fluid inside the eye to slip underneath the retina, decreasing vision.

In the study, published ahead of print in the journal *Retina*, the researchers reviewed the records of optic disc pit patients from centres in Edmonton, Calgary, Vancouver and London, Ont., to compare the effectiveness of surgical techniques used to treat the condition. Currently, most surgeons perform a vitrectomy, in which the jelly inside the eye is removed and replaced with another fluid, allowing the passageway from the optic disc pit to close and begin healing. In addition, many surgeons also perform two other procedures concurrently—injecting gas into the eye, and using laser surgery around the pit.

Rayat says the study shows using multiple procedures simultaneously is not only unnecessary, but also potentially harmful.

"We found it was best to start with a somewhat conservative surgery, and then if needed, proceed with the other procedures later on," says Rayat. "Some of those procedures, such as doing laser surgery, can actually cause damage to the vision that will never be recovered. In the case of injecting gas in the eye, it can create bubbles that can remain in your eye for weeks, decreasing your vision and preventing you from enjoying your life. So using a cautious approach in these cases is prudent."

In the majority of cases, Rayat says, the vitrectomy alone will be enough

for most patients, reducing both potentially harmful side-effects and recovery time.

"It just goes to show that you don't have to throw the entire kitchen sink at the problem."

Provided by University of Alberta Faculty of Medicine & Dentistry