

AHMED VALVE



(image from aao.org)

(image from sarawakeye.com)

What is it?

An Ahmed valve surgery may be recommended if despite medical therapy, the pressure inside your eye remains high enough to potentially cause permanent loss of vision. The aim of surgery is to lower eye pressure and thus decrease the risk of future vision loss; it will NOT improve or “get back” any vision that may already be lost. The Ahmed valve consists of a tube connecting to a very small plate containing a valve system. Scissors are used to make a pocket between the outer layers of tissue lining the eye. The plate is then tucked into this pocket and sutured in place with the tube extending into the anterior chamber of the eye. Donor eye tissue is used to cover the exposed area of the tube. Fluid (aqueous humor) can then travel from the anterior chamber through the tube to the conjunctival tissue outside the sclera where it is absorbed by the surrounding blood vessels. The valve-system controls how much fluid leaves the eye thus aiming to prevent the eye pressure from becoming too low.

What are the risks?

- Bleeding inside the eye (may require additional surgery to repair)
- Eye pressure too high or too low (in most cases, eye pressure will stabilize over a period of several months but occasionally may require more surgical intervention)
- Inflammation
- Blockage of tube
- Tube or Plate Erosion
- Infection
- Loss of vision

CAUTION!!

If you notice increasing or severe eye pain, sudden loss of vision or sticky/colored discharge, please call our office immediately at **403-245-3730**. If not during

business hours (Mon-Thurs 9:00 to 4:30, Fri 9:00 to 11:30), call **Alberta Health Link** at 403-943-5465, or go to the **Rockyview Hospital Emergency Department**.

What should I expect?

- You will be awake during the procedure however you will be offered a mild sedative prior to surgery
- The anesthesiologist will inject your eye with anesthesia; your cheek (similar to after dental freezing) and eye will feel numb for several hours after surgery
- You will then lay on a surgical table and be covered in a surgical drape leaving only the surgical eye exposed
- You may feel an occasional pulling sensation or twinge of discomfort but the procedure is generally painless
- The procedure will take approximately 30 minutes after which your eye will be patched.
- You will be at the surgery center for approx 2 hours then should go home to rest
- Your follow-up appointments will be at one and two days after surgery and then less frequently depending on healing
- Your eye may ache as the freezing wears off but should not be extremely painful; comfort should gradually improve over the first week. You may take Tylenol or Advil as directed. Vision may be blurrier than normal and your eye may be red but both should improve over the first few weeks after surgery.
- You should avoid lifting over 10 lbs, bending over, vigorous exercise, swimming pools/hot tubs/water in eye, rubbing the eye and any dirty/dusty environments for two weeks after surgery.
- Antibiotic and/or anti-inflammatory drops may be required for 2-3 months after surgery. While the aim of surgery is to lower eye pressure, glaucoma drops may continue to be required to maintain an ideal eye pressure post-operatively.
- **It may take up to 3-6 months for pressure to stabilize after surgery.**

