

# PHOTOTHERAPEUTIC KERATECTOMY (PTK) - INFORMED CONSENT

## ANTERIOR BASEMENT MEMBRANE DYSTROPHY (ABMD)

ABMD is a condition of abnormal maturation of the epithelial cells and basement membrane that forms the outermost surface of the cornea, the clear part on the front of the eye. These abnormal cells create an irregular corneal surface which can be comprised of parallel lines, white putty-like deposits, fine haze or scarring, and even elevated nodules.

## TREATMENT WITH MYTOMYCIN-C

Mytomycin-C (MMC) may be used during surgery to minimize the recurrence of ABMD, corneal nodules, and scarring. MMC was first used as an anti-cancer drug. Ophthalmologists use MMC for other purposes "off label" as normal practice of medicine\*. The decision to use MMC is based on the evaluation of advantages and potential risks in each individual case.

## **PTK SURGERY**

Dr. Harvey will use topical anesthetic eye drops to anesthetize the eye in order to perform corneal excision or superficial keratectomy surgery. The risks of anesthesia are minor, especially if topical medications alone are utilized. Topical anesthetics can cause ocular irritation, itching, redness, eyelid swelling, and delayed healing of the optical surface.

A surgical spatula is used to remove the areas of the cornea involved with ABMD and corneal nodules. Once the surface cells have been removed, the Excimer Laser is used to remove deeper scars, smooth the surface of the cornea, treat cornea erosions or change the shape of a cornea that has been distorted by injury or surgery. PTK removes the diseased portion of the cornea. This hopefully will improve vision and comfort of the eye.

#### **TREATMENT ALTERNATIVES**

You do not have to have the surgery, but that means your blurry vision and symptoms are likely to persist. It is important to try non-surgical alternatives before proceeding with surgery, like eye drops, ointments, and even contact lenses. These are used to smooth out the surface of the cornea thereby improving vision and reducing the incidence of painful corneal erosions.

#### **AFFECT ON VISION**

The goal of excising ABMD and corneal nodules is to decrease irritation\inflammation, achieve a normal, smooth ocular surface, improve any decrease in vision caused by these lesions, and prevent regrowth, if possible. Abnormal spots and scars can make an uneven and irregular corneal surface which can distort vision and cause intermittent painful corneal erosions. If you do not have this surgery your vision can worsen and pain can persist. It can also make it more difficult to get accurate preoperative measurements before cataract or refractive eye surgery.

#### **POST-OPERATIVE CARE**

Following excision of these growths, a bandage contact lens is often placed on the eye to reduce discomfort and assist in the healing of the corneal surface. Patients are usually treated with antibiotic eye drops to reduce the risk of infection, and steroid or non-steroidal anti-inflammatory drops to reduce post-operative pain and inflammation. Rarely, oral pain medications are needed. You will need to be followed closely until the corneal surface heals.



#### **RISKS & COMPLICATIONS**

There is no guarantee that the surgery treatment will improve your condition. Sometimes it doesn't work. In addition, surgery always has risks. Sometimes it can make the problem worse, cause an injury, or create a new problem; if it does, this is called a complication. Complications can happen right away or not until days, months, or years later. You may need more treatment or surgery to treat the complications. If the complication happens during surgery, your surgeon may need to perform another surgery right away to treat it. Your surgeon may discover a new condition or problem for the first time during the surgery. The surgeon may need to change the plan for surgery to treat this problem or condition right away.

It is impossible to list all risks and complications that may occur. The main risks and complications of surgery are delayed healing, infection, bleeding, loss of corneal clarity or scarring, corneal melting or ulceration, corneal perforation, double vision, nighttime glare, poor vision and injury to parts of the eye and nearby structures from the procedure or anesthesia, re-activation of prior infections and even blindness. The abnormal tissue from anterior basement corneal dystrophy including the nodules may grow back. You may need additional treatment or surgery to treat these complications.

In addition to the usual complications of PTK, MMC may cause blurred vision, worsened or loss of vision, ocular pain, ocular surface irritation, sensitivity to light, delayed healing, scleral or corneal melt with perforation, scarring of the conjunctiva or cornea, iritis, glaucoma, cataracts, and possible need for further surgery.

# CONSENT

By signing below, you agree that:

- You read this informed consent, or someone read it to you.
- You understand the information, including the risks, benefits and alternatives to surgery.
- Dr. Harvey and/or his staff offered you a copy of this informed consent form.
- Dr. Harvey and/or his staff answered your questions about PTK surgery.

I consent to have PTK surgery in my	RIGHT eye	LEFT eye	BOTH eyes.
Signature	Date	Witness	