Operation Information

Corneal Scrape / Culture

Introduction

Corneal scrapping is mainly a minor diagnostic procedure for corneal infections by removing some superficial corneal contents (mainly pus and some superficial corneal tissues) and to send them for bacterial or fungal culture. The purpose is to identify the causative agents, mainly bacteria or fungus, and to guide choice of antimicrobial treatment.

The procedure would preferably be performed before starting antibiotics treatment. For those who already have the treatment started, the decision of culturing depends on individual conditions. If you are on treatment but appear to be worsening, it is usually necessary to stop all antibiotics for 24 to 48 hours (a wash-out period) and the procedure might need to be repeated again.

Corneal scrapping can also be used therapeutically in some corneal diseases like corneal recurrent erosion or other surface diseases. Please discuss with your doctor for the appropriate option plan and treatment.

Outcomes

The expected outcome of this procedure is to remove the unhealthy surface of cornea (mainly the epithelium) for resurfacing with a healthier layer.

Procedures

Full cooperation would be required from patients during the scraping process.

1. Instillation of anaesthetic eye drops.
2. Scraping of the superficial cornea using a needle, a special spatula or a small sterile surgical blade.
3. Depositing the scrapped contents into special sterile culture plates or culture medium.
4. Repeating the above steps for different culture plates.
5. The procedure is usually done in the out-patient clinic, but sometimes it may be done under local or general anaesthesia in the operating theatre.
6. For situations such as corneal recurrent erosion, the treated eye may be padded after scrapping.
Possible Risks and Complications

1. Eye discomfort (including redness, pain and fear of bright light)
2. Corneal and eyeball infection
3. Corneal thinning or perforation
4. Corneal scar formation
5. Poor wound healing or recurrent corneal abrasion
6. Allergy to eye drops
7. Corneal swelling or oedema
8. Blurring of vision
9. Astigmatism
10. Transient blackout or fainting due to stress or vasovagal attack (usually recover after several minutes)
11. Eyeball perforation (uncommon)
12. Blindness (very rare and usually caused by the underlying disease)

** The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

Pre-operative Preparations

1. Good hygiene can prevent infection. Therefore, we advise you to clean up yourself on the day of operation.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation such as Aspirin, Warfarin, Xarelto or Pradaxa, nonsteroidal anti-inflammatory drug(NSAID) such as ibuprofen, naproxen and Chinese medication.
4. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses. Do not put creams, lotions, or makeup on the face or around the eyes.
5. Please empty your bladder before the operation.

Post-operative Instructions and Advice on Discharge

1. Good hygiene, especially eye and hand hygiene can reduce the risk of infection.
2. Please avoid wearing contact lens for a week.
3. Please avoid swimming and strenuous exercise for a week.
4. Do not rub the operated eye.
5. Immediately consult your doctor or return to hospital for professional attention in the event of acute eye symptoms like severe eye pain or blurring of vision or any other unusual symptoms etc.
6. Any follow-up consultations should be attended as scheduled.
Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details.
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification.