# **Diagnostics**

If you are having eye discomfort and symptoms of dry eye, it is important that you discuss your condition with an ophthalmologist. A comprehensive eye examination is needed to evaluate the quality and quantity of tears produced by the eyes. Diagnostic procedures may include:

- Taking a history to note if any health condition which may contribute to dry eye
- · Examining the eyelids and cornea
- Performing a fluorescein staining test to examine tear film stability and tear break-up time
- Conducting a tear test to measure tear secretion

## **Treatments**

The best treatment option will be tailored to the pattern and severity of dry eye by the ophthalmologist. Treatment strategies are fundamentally aimed to increase the fluid quantity on the ocular surface, augment the lubricity of tears and decrease tear evaporation.

- Reduce reading time and use of computer and ensure adequate rest
- · Use eye lubricants: artificial tears, gel and ointment
- · Avoid environmental triggers
- Apply warm compresses and maintain eyelid hygiene
- Take oral supplements like flaxseed oil and Omega-3 fatty acids
- Use Cyclosporine eyedrops/ topical steroid eye drops
- Insert punctum plugs
- · Maintain a balanced diet
- Consider other therapies: punctal occlusion surgery, use autologous serum eye drops, or wear scleral lens or protective eyewear for severe cases

### **HKSH Ophthalmology Centre**

#### **Happy Valley**

Hong Kong Sanatorium & Hospita 4/F, Li Shu Fan Block 2 Village Road, Happy Valley, Hong Kong Tel: (852) 2835 8880; (852) 2835 8890 Fax: (852) 2892 7510 eye@hksh-hospital.com www.hksh-hospital.com

#### Service Hours

Monday to Friday: 9:00 am – 5:00 pm Saturday: 9:00 am – 1:00 pm Closed on Sundays and Public Holidays Consultation by Appointment

#### Admiralty

HKSH Healthcare Medical Centre Level 21, One Pacific Place 88 Queensway, Hong Kong Tel: (852) 2855 6700 Fax: (852) 2523 7660 eye@hksh-healthcare.com www.hksh-healthcare.com Service Hours

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For enquiries and appointments, please contact us

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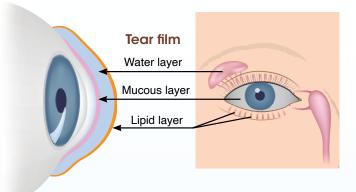
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Tears are crucial for clear vision and eye comfort. Coating the eyes, they help maintain a healthy ocular surface and protect the cornea from damage and infection.

The tear film is made up of water, mucous, and lipid layers. Lipids secreted by oil glands, or the Meibomian glands, prevent evaporation of the tear film from the ocular surface. The water layer, produced by lacrimal glands and conjunctival cells, contains electrolytes, antibodies, nutrients, and other substances, serving as a lubricant. Mucus produced by conjunctival goblet cells provide an even and smooth tear film over the eyes to minimise friction during blinking. Tears drain out continuously from the eyes through the tear ducts.



Any change in the quantity or quality of tears compromises the ocular lubricity and results in dry eye syndrome.

There are two common types of dry eye, aqueous-deficient and evaporative dry eye. Aqueous-deficient dry eye is characterised by decreased secretion of tears from the lacrimal glands and conjunctiva. Evaporative dry eye results from excessive evaporation of tear fluid from the ocular surface. It is mostly caused by Meibomian gland dysfunction which affects the normal secretion of lipids. The usual patterns of dry eye are mixed with aqueous-deficient and evaporative forms. A special form of dry eye condition, called Keratoconjunctivitis Sicca, is caused by an autoimmune disease and may also have systemic involvement.



## **Common Symptoms**

Dry eye can be associated with a host of irritative symptoms. Severe dry eye can cause damage to the surface of your eyes. Common symptoms of dry eye include:

- Dryness
- Redness
- · Burning sensation
- Itchiness
- Foreign body sensation
- Photophobia
- Blurry vision
- Excessive tearing
- Sharp or dull pain

### **Common Causes**

Dry eye can be caused by a variety of factors, and some common causes include:

- Ageing
- Lifestyle-related (e.g. prolonged reading, computer use)
- Environmental triggers (dusty, windy or dry climates; use of dehumidifier, air-conditioning or heaters)
- · Extended use of contact lenses
- · Meibomian gland dysfunction/ Blepharitis
- Hormonal changes (menopausal/ postmenopausal women)
- · After corneal surgery
- · Use of eye medications with preservatives
- · Effects of some medications
- · Vitamin A deficiencies
- Anatomical abnormalities of eyelids or facial nerve disorders
- Autoimmune diseases: Sjögren's syndrome, rheumatic arthritis, systemic lupus erythematosus
- · Medical diseases: thyroid diseases, diabetes
- Lacrimal gland disease

## 診斷

如您感到眼部不適和有眼乾症狀,請盡快與眼科專科 醫生商討,並接受全面眼睛檢查,以評估淚水的質量 及分泌量。診斷過程可包括:

- 查問健康歷史,評估可能導致乾眼的因素
- 檢查眼瞼和角膜
- 進行螢光染色測試以評估淚膜穩定度及量度 淚水層破裂時間
- 進行淚水測試以量度淚水分泌

# 治療

眼科專科醫生會根據眼乾種類和嚴重程度訂立 最佳治療方案。治療方法目的主要是增加眼球表面 的液體分量、增加淚水滋潤性和減少淚水揮發。

- 減少閱讀及使用電腦螢幕時間、保持足夠 休息等
- 使用滋潤眼藥水:人造淚水、啫喱及藥膏
- 避免導致眼乾的環境因素
- 暖敷眼臉及保持眼臉衛生清潔
- 服用口服補充劑:亞麻籽油、奧米加-3脂肪酸等
- 使用環孢素眼藥水/類固醇眼藥水
- 放置淚管寒
- 保持均衡飲食
- 其他治療方法:如眼乾情況嚴重,可考慮施行 淚管封塞手術、使用自體血清眼藥水、配戴 鞏膜鏡或保護性眼鏡

## 養和眼科中心

### 跑馬地

養和醫院

香港跑馬地山村道2號李樹芬院4樓

電話: (852) 2835 8880; (852) 2835 8890

傳真:(852)28927510

辦公時間

星期一至星期五:上午九時至下午五時

星期六:上午九時至下午一時 星期日及公眾假期休息

敬請預約

#### 金鐘

養和醫健專科中心

香港金鐘道88號太古廣場一座21樓

電話:(852)28556700 傳真:(852)25237660

辦公時間

星期一至星期五:上午九時至下午五時

星期六:上午九時至下午一時

星期日及公眾假期休息

敬請預約

查詢或預約,歡迎聯絡我們

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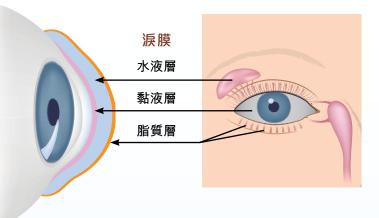






淚水的作用十分重要,既可保持視力清晰,令眼睛感到舒適,覆蓋眼睛表面亦有助維持眼睛健康,保護 角膜免受傷害和感染。

淚膜由水液層、黏液層和脂質層所組成。脂質是由 瞼板腺所分泌,可防止淚膜從眼睛表面揮發。淚腺 及結膜細胞負責製造水液以滋潤眼睛,當中混合了 電解質、抗體、營養及其他物質。黏液則由結膜杯狀 細胞所生產,能使淚膜在眼睛表面形成一層均匀及 平滑的塗層,以減低眨眼時產生的摩擦。淚水隨後會 頒過淚管從眼睛流走。



淚水的分泌量或質量如有任何變化,都會令眼睛 滋潤不足而導致乾眼症。

常見乾眼症主要分為淚水分泌不足及揮發性乾眼兩種類型。淚水分泌不足源於淚腺及結膜減少水液分泌,而揮發性乾眼是由於瞼板腺功能障礙,影響正常脂質分泌,導致淚水從眼睛表面過度揮發。乾眼症病者大多數都有以上兩種混合類型的症狀。另一種較特別的乾眼情況稱為乾性角膜結膜炎,是與自體免疫系統有關而引致的全身性疾病。



## 常見症狀

乾眼可帶來多種刺激性症狀,嚴重者更可能對眼睛 表面造成損害。常見乾眼症狀包括:

- 乾.澀
- ●眼紅
- 灼熱感
- ●狼癢
- 異物感
- 畏光
- 視力模糊
- 淚溢
- 刺痛或鈍痛

## 常見成因

乾眼可以由多方面原因導致,常見原因包括:

- 年紀增長
- 生活習慣影響(如長期閱讀、使用電腦螢幕)
- 環境因素(灰塵多、大風或乾燥天氣:使用抽濕機、冷氣或暖氣)
- 長期配戴隱形眼鏡
- 瞼板腺功能障礙/瞼緣炎
- 荷爾蒙變化(更年期/更年期後婦女)
- 曾接受角膜手術
- 使用含有防腐劑的眼藥水
- 某些藥物作用
- 缺乏維他命A
- 眼臉結構異常或面部神經出現問題
- 免疫系統疾病:乾燥綜合症、類風濕關節炎、 系統性紅斑狼瘡症
- 內科疾病:甲狀腺病、糖尿病
- 淚腺病變