# NOT A DRY EYE IN THE HOUSE

CAUSED BY A LACK OF LUBRICATION AND MOISTURE ON THE SURFACE OF THE EYE, DRY EYE SYNDROME IS A COMMON CONDITION THAT CALLS FOR A VISIT TO THE OPHTHALMOLOGIST.



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Even when you are happy, the outer surfaces of your eyes are continuously bathed by a layer of tears. Apart from keeping the eyeball wet, tears also protect your eyes from infection and assist in the healing of surface wounds.

When the quality and/or quantity of tears are abnormal, this can lead to damage of the outer eye surface, irritation of the eyes or visual disturbances. Dry Eye Syndrome, or DES, is associated with many symptoms, including:

- Stinging or burning sensation
- Sandy or gritty feeling in the eye
- Episodes of excess tears following very dry eye periods
- A stringy discharge from the eye
- Pain and redness of the eye
- Blurred vision
- Heavy eyelids
- Contact lens discomfort
- Decreased tolerance for reading, working on the computer or any activity that requires sustained visual attention
- Eye fatigue

#### WHY YOUR EYES GET DRY

While the condition can occur at any age, the elderly and women past their menopausal years are more prone to developing DES. Women who are pregnant or on hormone replacement therapy, and those who have allergies or autoimmune diseases such as lupus, rheumatoid arthritis, and Sjogren's syndrome are also susceptible.

There are many causes of DES, and they may be temporary or chronic. Skin disease on or around the eyelids, diseases of the glands in the eyelids and long-term use of contact lenses are possible reasons.

Dry eyes can also be a side effect of cataract surgery and LASIK or PRK surgery, which correct vision problems. Certain medications like antihistamines, beta-blockers, and some antidepressants may affect tear production and cause dry eyes, too.

Gazing at the computer for long periods of time can give rise to problems, as you are less likely to blink when your eyes are fixed on the screen. Blinking restores the tear film and protects eyes from particles in the air and dead cells.

To determine whether you have DES, go for a comprehensive eye exam that measures both the volume and quality of your tears. Once a diagnosis has been made, treatment can be tailored according to the cause.

### MANAGING YOUR CONDITION

If chronic DES is the result of an underlying condition, once the disease is cured or managed, the dry eyes will naturally be resolved. If it is a side effect of medication, alternatives can be prescribed.

Where the cause is less obvious, artificial tears, gels and ointments can be used to replace naturally produced tears. Eye drops may also be applied to ease inflammation. In some people, taking supplements or increasing dietary sources of omega-3 fatty acids (especially DHA and EPA), which are found in fatty fish such as salmon, sardines and mackerel, can help reduce irritation.

When you are outdoors, wear glasses or sunglasses that fit close to the face (wrap-around shades) or have side shields to help inhibit tear evaporation from the surface of your eyes. When swimming, put on goggles to prevent your eyes from coming into contact with chlorine. Compounds that form when

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chlorine mixes with sweat, dirt or personal care products can also irritate your eyes.

While indoors, use an air purifier to filter dust and other particles. You can also install a humidifier, which increases moisture in the air. With that, tears evaporate slower, thus keeping your eyes more comfortable. If you notice your eyes becoming dry while reading, watching TV, or using other digital devices, take frequent breaks to allow your eyes to rest and moisten.

Prescription dry eve medications, including antiinflammatory medication (such as Cyclosporine and Corticosteroid eye drops), may be necessary in more severe cases. Punctal plugs made of silicone or collagen may be inserted by the eve doctor to partially or completely plug the tear ducts at the inner corners of the eve to keep tears from draining from the eye. In severe cases, surgical closure of the drainage ducts by thermal punctal cautery may be required to close the tear ducts permanently.

#### **GUARDIAN OF THE EYE**

Dr Leo Seo Wei is a Senior Consultant Ophthalmologist and Medical Director at her private practice, Dr Leo Adult & Paediatric Eye Specialist Pte Ltd. Besides managing all aspects of general ophthalmology, including cataract

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surgery, laser procedures and refractive surgery, Dr Leo has special interests in strabismus surgery and paediatric ophthalmology, such as anterior segment diseases, refractive errors, and learning disabilities in children.

After graduating from the National University of Singapore (NUS). Dr Leo completed basic specialist training at the Singapore National Eye Centre (SNEC). National University Hospital (NUH) and Tan Tock Sena Hospital (TTSH). Subsequently, she obtained Fellowship of Royal College of Surgeons of Edinburgh and was inducted as a Fellow of the Academy of Medicine Singapore (Ophthalmology). Dr Leo went on to complete two intensive clinical fellowships in the United States (Ann Arbor and Los Angeles).

Upon her return to Singapore, Dr Leo worked at TTSH, where she established and helmed the Eye Alignment Clinic and the Children's Eye Centre. The esteemed doctor was also the inaugural faculty for the AAPOS (American Association of Pediatric Ophthalmology & Strabismus)-Tianjin Eye Centre Paediatric Ophthalmology fellowship programme.

In addition, she served as clinical lecturer at the Yong Loo Lin School of Medicine in NUS and core faculty at the Singapore Polytechnic-Manchester University Optometry degree programme. Dr Leo is also

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the immediate past Head of Paediatric Ophthalmology & Strabismus at the National Healthcare Group (NHG) Eye Institute.

Apart from publishing numerous peer-reviewed articles. Dr Leo has presented and performed live surgery at various international conferences in Asia-Pacific, Europe and US. Accolades for her research work include The Eye Institute-Pfizer Research Prize for Best Original Paper (2004) and Best of Show at the American Academy of Ophthalmology (AAO) 2010 Annual Meeting. She is also a reviewer for many journals, including Survey of Ophthalmology and British Journal of Ophthalmology. She is currently in the Scientific Bureau of the World Society of Paediatric Ophthalmology and Strabismus (WSPOS), and is a committee member of the AAO as well as a board member of the

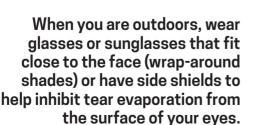
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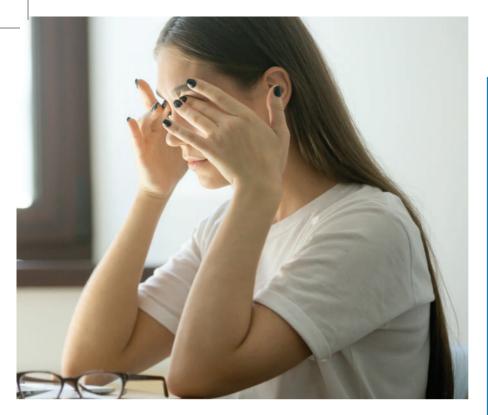
Institutional Research Board (CIRB).

#### **KEEP A LOOKOUT**

Dr Leo Adult & Paediatric Eye Specialist Pte Ltd is a one-stop centre that boasts a comprehensive range of advanced eye diagnostic and treatment services, as well as a team of eye care professionals (ophthalmologist, orthoptist, optometrist) all under one roof.







#### Services offered include:

- Complete eye screening for adults and children (including diabetics, and children with learning disability and special needs)
- General eye screening (driving licence vision test, laser licence vision test)
- Cataract surgery (femtosecond laser-assisted cataract surgery, premium intraocular lens implantation, trifocal lens implantation)
- Laser procedures (refractive surgery, LASIK, implantable contact lens)
- Myopia control (atropine treatment)
- Strabismus surgery and lazy eye management
- Diagnosis and follow-up treatment of glaucoma, diabetic retinopathy (DR) and age-related macular degeneration (AMD)
- Presbyopia correction
- Treatment of eyelid problems and external eye diseases (infection, allergies)

 Treatment of complex eye problems in children (congenital problems, retinopathy of prematurity)

Investigations are carried out with an array of on-site facilities:

- Optical Coherence Tomography (anterior and posterior segment)
- Optical biometry
- Fundus photography
- Fundus autofluorescence
- Fundus fluorescein angiography (FFA)
- Indocyanine green angiography (ICG)
- Determination of macula pigment density
- Humphrey Visual Field Test
- Autorefraction/Manifest refraction/Cyclorefraction
- Determination of intraocular pressure (Goldmann tonometry, air-puff tonometry, handheld intraocular pressure measuring device)
- Handheld slit lamp
- Anterior segment photography
- Corneal topography
- FDT (rapid visual field test)

## DR LEO ADULT & PAEDIATRIC EYE SPECIALIST PTE LTD

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