

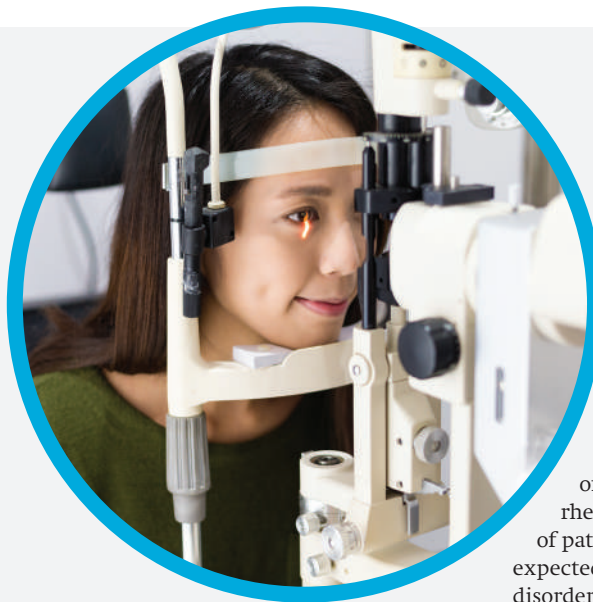
Auto-immune disorders and your vision

Autoimmune diseases can adversely impact the entire body. We look at a few of these conditions and how they — as well as the medications for them — affect your vision.



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Uveitis

Uveitis (pronounced you-vee-EYE-tis) refers to the irritation and inflammation of the uvea, the middle layer of the eye, which provides most of the blood supply to the retina.

Inflammation at the front, middle and back of the eye is respectively known as anterior, intermediate and posterior uveitis. Uveitis may affect only one eye.

Apart from autoimmune diseases such as rheumatoid arthritis and ankylosing spondylitis, infection and trauma are possible causes of uveitis. In addition, some are idiopathic, meaning the cause is unknown.

Symptoms of uveitis — such as blurred vision, dark and floating spots within vision, painful eye, redness and sensitivity to light — can develop rapidly. Uveitis can damage vital eye tissue, leading to permanent vision loss.

Graves' disease

Graves' disease causes the thyroid gland to produce excessive hormones. About 30% of people with this disease are said to display signs and symptoms of an ocular condition known as Graves' ophthalmopathy — the inflammation of eye muscles and tissues. A distinct characteristic of Graves' disease is exophthalmos, characterised by inflamed eye muscles and accompanying bulging of the eyes.

Exophthalmos mildly affects about 30–50% of Graves' patients, while about 5% develop its severe form. Inflammation of the eye muscles results in restriction of eye movement and double vision. In severe cases, swelling of the eye muscles/tissue impinge upon the optic nerve and results in vision loss. Eye protrusion makes it difficult for the eyelids to close properly, leaving the cornea exposed and vulnerable.

On the other hand, an underactive thyroid (hypothyroidism) isn't usually associated with eye disease, although severe cases of hypothyroidism may cause swelling around the eyes and a loss of hair in the outer part of the eyebrows.

Rheumatoid arthritis

In Singapore, an estimated 0.5–1% of the general population have rheumatoid arthritis. Approximately 25% of patients with rheumatoid arthritis are expected to experience accompanying ocular disorders, including keratoconjunctivitis sicca (severe dry eyes), inflammation of the white of the eye (scleritis, episcleritis), cornea inflammation, and peripheral corneal ulceration.

Multiple sclerosis

Multiple sclerosis is a long-term condition affecting the brain, spinal cord and the optic nerves, with visual problems showing up as the first indicator of the disease.

Optic neuritis, which happens when the optic nerve connecting the eye to the brain gets inflamed, is often the first symptom of multiple sclerosis. Besides multiple sclerosis, optic neuritis can occur with infections, other immune diseases, or can be idiopathic.

The most common ocular conditions caused by multiple sclerosis are decreased or blurred vision, double vision (diplopia) and involuntary movements of the eyes (nystagmus). While inflammation and demyelination along the optic nerve cause optic neuritis, double vision and involuntary eye movements are the effects of lesions in the brain.

Drugs for autoimmune diseases

Some oral medications for autoimmune disorders may have adverse effects on the eye, including:

- **Steroids** Long-term use can cause lens clouding (cataracts) and increased risk of high eyeball pressure (glaucoma).
- **Antimalarials** Hydroxychloroquine can cause toxicity to the retina, resulting in decreased vision. The risk increases with duration of treatment.

Patients with autoimmune diseases should take care of their eyes by going for regular screenings and paying special attention to vision changes. [🔗](#)