# **Diabetic retinopathy**

## What to expect from retinal clinic consultation?

During the consultation I have to examine both the front and back of your eyes

I usually use pupil dilation drops so that I can examine the lens and the retina, including the optic nerve. Your vision will be blurred during at least 2 hours (up to 6 hours) after drops, so you will not be able to drive after consultation for that period of time.

**OCT scan** of the retina could be done the same day of the consultation. It gives an accurate information of the shape and central retinal thickness (CRT) and helps to predict the surgical results.

Diabetic Retinopathy is a complication of diabetes

Damaged by high sugar levels blood vessels of the retina could cause a leakage into the retina: **macular oedema** and deteriorate the vision.

#### Macular Oedema treatment

Current treatment options of diabetic macular oedema are laser and intravitreal injections

Laser option is available for the treatment of macular oedema if the leaking vessels are localised far from the central area.

Intraocular injections are indicated when the damaged vessels are too close to the central area and laser is not the best option of the treatment. There are several anti-VEGF intravitreal injections drugs available, but three are most commonly used. Two of these, ranibizumab (brand name Lucentis®) and aflibercept (brand name Eylea®), were designed for the treatment of AMD and both are used in diabetic macular oedema. A third drug, bevacizumab (brand name Avastin®), commonly used "off-label" in patients with AMD, is also could be used in diabetic retinopathy

# **Advance Diabetic Retinopathy treatment**

When advance stage of diabetic retinopathy is detected, retinal laser (pan-photocoagulation) could stabilize the problem, prevent progression and avoid the surgery. When **complications of** advance stage of diabetic retinopathy such as bleed into the vitreous (vitreous haemorrhage) or

tractional retinal detachment occur, an operation (vitrectomy) to remove blood and or scar tissue could be indicated.

Surgery for tractional retinal detachment consists in using 3 small ports for the micro-instruments to remove the gel (vitrectomy), remove the scar tissue from the surface of the retina so the retina could be safely re-attached again. Panphotocoagulation (PRP) typically used in advance diabetic retinopathy is used to treat the peripheral damaged by diabetes retina. Silicone oil or gas is used at the end of surgery as a tamponade to support the retina on its anatomical place until the retina is re-attached again.

**General risks** of Infection, Bleed, Retinal Detachment are very low but will be discussed prior to surgery

Follow ups will be arranged week 1, week 3-4 and week 8, 12 weeks

**Airplane travels** are contraindicated during the period of 14 days after the surgery

Antibiotic topical drops need to be used to prevent infection

**Driving** is advised only after the first 2 weeks

**Sport activities, gym, gardening** and other physical activities are recommended after the antibiotic drops are finished, after 4 weeks post-surgery

### How to prevent diabetic retinopathy

To minimise the risk of diabetic retinopathy following actions are advised:

- ensure that blood sugar levels, blood pressure and cholesterol are under control
- perform the diabetic eye annual screening



Photography Before surgery



Photography After surgery