



University  
Hospitals Sussex  
NHS Foundation Trust

# Marcus Gunn Jaw Winking Syndrome

Orthoptic Department  
St Richard's Hospital  
Southlands Hospital

Patient information

This leaflet is intended to answer some of the questions of patients or carers of patients diagnosed with Marcus Gunn Syndrome under the care of University Hospitals Sussex NHS Foundation Trust.

## **What is Marcus Gunn?**

The condition was first described in 1883 by the ophthalmologist (eye doctor) Marcus Gunn.

Patients with Marcus Gunn will have a droopy eyelid (ptosis) which lifts when the jaw is moved from side to side.

This is usually noticed when smiling or chewing.

The lid changes occur because muscles that move the eyelid (levator muscle) and the jaw (pterygoid muscle) have developed abnormal connections that cause them move simultaneously.

## **When does it develop?**

This condition develops before birth and is present in approximately 5% of new-borns with ptosis (droopy eyelids).

## **Are there associated problems?**

54% of cases may develop amblyopia (reduced vision), 26% anisometropia (one eye which is more long or short sighted than the other) and 56% may also have a strabismus (an eye which is deviated from the centre).

In over half of cases there may be a limitation of the movement of the eye upwards.

## Who is affected?

This condition usually affects only one eye. It affects males and females in equal proportion and in some cases it can be hereditary (passed on through the family).

## What does it look like?

Patients have a variable amount of droopy eyelid in the normal resting position. On stimulation of the jaw muscle there is a 'wink' phenomenon - the upper eyelid lifts upwards and this is then followed by a rapid return to the lower position of the eyelid. The amount of wink can appear worse when looking down. This condition is usually noticed as a baby when feeding.

## What are the signs?

- Mild to moderate ptosis (droopy eyelid) usually on 1 side.
- Upper eyelid movement when chewing, sucking, jaw moving forward, clenching teeth or swallowing.
- Worsening of symptoms when looking downwards.

## What caused it?

It is believed to be a neural misdirection syndrome. This means the nerves that supply the eyelid and jaw muscles are not directed as they should be and are connected. This occurs as the baby develops in the womb and there is no way to prevent this during pregnancy.

# What treatment is needed?

Treatment is usually unnecessary. It is not possible to change the nerve connections and so the syndrome cannot be 'cured'.

If there is a significant droop of the eyelid in a normal resting position then it may be possible to perform surgery on the eyelid muscles. The orthoptist can refer you/your child to the ophthalmologist (eye surgeon) to discuss whether or not this is appropriate.

If there are any associated vision problems then this will be managed with glasses if appropriate. If reduced vision in one eye persists then this will be treated with patching. This is where the patient wears an eye patch over their better seeing eye for a few hours daily.

There may be variation in the eyelid movements caused by Marcus Gunn and each person affected will not be affected in exactly the same way.

The child will need to be supported in view of social implications caused by the appearance of this syndrome.

## Contact numbers

### Orthoptist:

**St Richard's 01243 831499**    **Southlands 01273 446077**

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