Intravenous Methylprednisolone for Thyroid Eye Disease

Patient Information
What is Thyroid eye disease?

Thyroid eye disease is an auto immune disease of the soft tissue such as the fat and muscles surrounding the eyes. The disease is characterised by a period of inflammation and swelling of these tissues, followed by a healing response.

The body’s immune system usually fights off infection but in an auto-immune disease it attacks the body’s own tissues with antibodies. At the moment the reason for this is not entirely clear.

When an auto-immune attack starts on the thyroid gland, it responds by producing more of its hormones. At the same time the auto-antibodies attacking the thyroid gland also attack the tissues around the eyes.

As the soft tissue around the eye becomes inflamed, some of the following problems can occur:

- The eyelids become puffy and red (lid swelling).
- The muscles of the eyelids contract, producing a staring appearance (lid retraction).
- The muscles and fat surrounding the eye swells, pushing the eyes forward so that they bulge.
- Lid retraction and exophthalmos make the dry eye symptoms worse.
- The swelling of the muscles which move the eyes produce unequal movements and double vision (diplopia).
- The orbits may become painful, particularly on eye movement.

In some patients who have firm tissue, the eyes may not bulge forward. This results in the pressure inside the orbit increasing which in turn compresses on the optic nerve and causes sight problems. The optic nerve carries messages from the eye to the brain and can be damaged by this increase in pressure.
What does the treatment involve?

Intravenous administration of methylprednisolone can help to reduce the pressure on the optic nerve. It may also help permanent eye damage from occurring. It works by reducing the swelling around the eyes. If the steroid treatment is not closely monitored then side effects may occur such as weight gain, thinning of the bones / skin and raised blood sugar levels. These side effects are more likely if steroid treatment is taken by mouth rather than an infusion. This is why it is only used for more severe cases and is used under specialist supervision.

When you attend the eye clinic for your consultation, the doctor seeing you will take a detailed clinical history from you before making the decision to treat your thyroid eye disease with intravenous methylprednisolone. You may also be required to have some additional diagnostic tests.

Intravenous administration of methylprednisolone treatment is carried out in the eye clinic. Once you have seen the doctor and you have given consent to treatment, you will be taken to one of the examination / consultation rooms. The nurse will take your blood pressure, pulse rate, breathing rate and blood sugar levels if you suffer from diabetes.

With your consent, a small plastic tube (cannula) will be inserted into the back of your hand and the intravenous methylprednisolone will be administered through a saline drip. This treatment will take approximately 1 hour. At the end of the treatment the cannula will be removed and a small adhesive dressing (plaster) will be applied. You will then be able to go home.

After treatment

If you have concerns following your treatment, please speak to the nurse caring for you. Alternatively you can get further advice from the eye clinic on 01493 452594
The hospital is able to arrange for an interpreter to assist you in communicating effectively with staff during your stay through INTRAN.

If you need an interpreter or a person to sign, please let us know.

If you require a large print version of this booklet, please contact PALS on 01493 453240

Further Information on thyroid eye disease can be obtained from:
www.rnib.org.uk
The Thyroid Eye Disease Association
Solstice
Sea Road
Winchelsea Beach
East Sussex
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