

Gonadotrophin Releasing Hormone Test

Background

Gonadorelin is a man-made protein that is like a hormone in the body called gonadotrophin-releasing hormone (GnRH). GnRH causes the master gland of the body, the pituitary gland, to release other hormones called luteinizing hormone (LH) and follicle-stimulating hormone (FSH). LH and FSH work on the gonads (ovaries and testes) and are important for proper pubertal development in children and fertility in adults.

Gonadorelin is used to test how well the hypothalamus (higher brain centres) and pituitary gland are working in disorders of puberty.

Key points

No fasting is required for this test, so your child can eat and drink normally.

If your child is unwell (fever, vomiting or diarrhoea), please phone the Day Treatment Unit on 6456 3772 to cancel and rebook.

Arrival

Please go to the Day Treatment Unit. It is on the first floor at Clinic E. Take the Yellow or Pink lifts.

The Gonadotropin Releasing Hormone Test

Once admitted a local anaesthetic cream will be applied. This cream is applied to your hand and/or inner elbow. This cream will numb the skin. This cream takes about an hour to work. An intravenous line can then be put in without causing any pain.

A needle is used to insert the intravenous cannula. Once in the vein the needle is taken out. A plastic tube is left lying in the vein. This plastic tube should not cause any pain. Once in, it stays in for the whole test.

At the start of the test a baseline blood sample is taken. Then the GnRH is given slowly through the plastic tube over one minute. Blood samples are taken at timed intervals for one hour after the injection. This blood is used to measure the hormone response (LH and FSH) of the pituitary gland to the gonadorelin.



Possible side effects of GnRH are:

- headache,
- flushing,
- nausea or abdominal discomfort,
- dizziness or light headedness,
- pain, swelling, or itching at the injection site, or
- skin rash.

It is rare for GnRH to cause a severe allergic reaction (anaphylaxis). This is why the test is only carried out in hospital.

At the end of the test, the child may eat and go home if feeling well. The intravenous line is removed.

Why is Gonadorelin unlicensed and what does this mean?

Gonadorelin is not currently approved for marketing in Australia by the Therapeutics Goods Administration (TGA). The TGA is a Government body that vouches for the safety and function of medicines in this country.

Gonadorelin has been used for many years for both diagnostic and fertility purposes in Australia and most other western countries. The primary reason for not being currently licensed and freely available is not related to safety or function concerns. At the moment, it can only be prescribed by a doctor who has been given special authority by the TGA to do so.

Results

The results will be sent to your Doctor in 2-3 weeks. You will receive these results at your next Endocrine Clinic or private endocrine appointment, or your doctor may phone you.

This document can be made available in alternative formats on request for a person with a disability.

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Government of **Western Australia**
Child and Adolescent Health Service

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