

Luteinising Hormone Releasing Hormone (LHRH) test

This leaflet provides information about your child's LHRH test. If you have any questions, please speak to a doctor or nurse caring for your child.

About the test

A LHRH tests the function of the hormones that start puberty. These hormones are called the luteinising hormone (LH) and follicle stimulating hormone (FSH).

- In girls, the ovaries are stimulated by LH and FSH during the menstrual cycle to produce oestrogen.
- In boys, the testes are stimulated by LH to produce testosterone, and FSH to stimulate sperm production.

During the test, we use a synthetic formulation of LHRH which is similar to the hormone your body makes naturally. This stimulates the pituitary gland to produce LH and FSH. We can then measure how much is made.

Your child's doctor has recommended this test as they need to see if your child's hormone levels are normal for their age and stage of puberty. This test is often recommended if we think your child may have early or late puberty.

Benefits of having the test

This test can help your child's doctor understand what may be causing the signs of early or late puberty. It can help them make the right decision about any treatment that your child might need.

Preparing your child for the test

Your child can eat or drink normally.

Changes to your child's medicines

If your child takes any type of hormone medicine they must stop taking this before the test. This includes testosterone or oestrogen patches, gels, creams and tablets. If you have any questions about this please speak to the endocrine nurses

Giving your permission (consent)

Before the procedure, we will ask for your consent. We will check that you understand what the test involves, and that you agree for your child to have it.

If you would like more information about our consent process, please speak to a member of staff caring for you.

During the test

Your nurse or healthcare assistant will take your child's weight and height, and measure their pulse rate, blood pressure, breathing rate and temperature.

We will insert a small plastic tube (cannula) into a vein in your child's arm or hand. We will offer your child numbing cream or cold spray to make this more comfortable. The cannula will stay in for the duration of the test. This will be used to give your child a dose (amount) of the synthetic LHRH. We will also take 2 or 3 blood samples in total throughout the test, to measure the amount of puberty hormones your child has produced in response to the LHRH.

When the test is finished, we will take the cannula out and cover the area with a plaster, and make sure that your child is safe to leave hospital.

Including preparation time, the test lasts for about 3 or 4 hours.

Side effects

The LHRH test does not usually cause side effects. Some children report a headache, or feeling sick (nausea), but this is rare.

Very rarely, girls may have some spotting (very light vaginal bleeding) after the test. This should only last for about 2 or 3 days, and it should go away by itself. If your child has any spotting and you are concerned, please contact the endocrine nurses.

The effect of the synthetic LHRH will wear off very quickly. Your child's hormone levels will return to normal within 2 hours. The test does not have any long-term effects on puberty or fertility.

Follow-up appointments

Results are usually available after 4 to 6 weeks. We will contact you to arrange a phone appointment with one of the nurses or doctors to discuss the results.

Preparing your child for procedures

These are some tips for supporting young people through procedures. You know your child best, so adapt these ideas to your child and family.

Planning

Plan for the day by calmly explaining to your child what will happen and why.

Motivation

You can increase your child's motivation for procedures by letting them know why the procedure is important. You can also get them involved in planning the day, such as:

- asking what they want to bring with them
- making a list of any questions they may have
- agreeing extra screen or play time after the procedure

Distractions

When the cannula is inserted some children may want to look away, talk, or listen to music. It

can also be a long day in hospital, so you might want to bring activities and distractions.

Comfort

If your child has a comforting toy or teddy feel free to bring it on the day.

Relaxation and breathing

Procedures are more manageable when the body is relaxed. Try encouraging your child to take slow breaths and to release tension in their body. It may be worth practicing this at home if you know your child is anxious about procedures.

Reassure

Remind your child that this is a routine procedure and being nervous is normal. Reassure them that you will be there for support.

If you know your child has a needle phobia, or becomes extremely anxious about procedures, please let the team know. We can get in touch with the play specialist team.

For more information about preparing your child for hospital, please visit [web www.evelinalondon.nhs.uk](http://www.evelinalondon.nhs.uk).

Contact us

If you have any questions about your child's LHRH test, please contact the Endocrine nurses. [Email evelinaEAB@gstt.nhs.uk](mailto:evelinaEAB@gstt.nhs.uk) or [phone](tel:02071887188) 020 7188 7188 extension 56129, Monday to Friday 9am to 5pm.

For questions about your **child's outpatient appointment**:

[Email paediatricappointmentsendocrinology@gstt.nhs.uk](mailto:paediatricappointmentsendocrinology@gstt.nhs.uk)

For questions about your **child's ward admission**:

[Email paediatricadmissionofficers@gstt.nhs.uk](mailto:paediatricadmissionofficers@gstt.nhs.uk)

For more information on conditions, procedures, treatments and services offered at our hospitals, please visit [web www.evelinalondon.nhs.uk/leaflets](http://www.evelinalondon.nhs.uk/leaflets)

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline, [phone](tel:02071883003) 020 7188 3003, Monday to Friday, 10am to 5pm [email letstalkmedicines@gstt.nhs.uk](mailto:letstalkmedicines@gstt.nhs.uk)



Leaflet number: 5506/VER1

Date published: January 2025

Review date: January 2028

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A list of sources is available on request