

Short Synacthen test (SST)

This leaflet provides information about your child's short Synacthen® test (SST). If you have any questions, please speak to a doctor or nurse caring for your child.

About the test

A short Synacthen® test (SST) lets the team caring for your child see how well your child's adrenal glands are working. There are 2 adrenal glands, one above each kidney.

The adrenal glands produce 3 important hormones:

- cortisol (natural steroid hormone)
- aldosterone (salt balance hormone)
- androgens (weak male hormones)

During an SST, we use a synthetic hormone called Synacthen (tetracosactide), which is similar to a hormone your body makes naturally. This stimulates the adrenal glands to produce cortisol, and we can then measure how much is made. The test tells us how your child's hypothalamus, pituitary gland and adrenal glands work together.

Benefits of having the test

An SST is the best way to measure cortisol, as natural cortisol levels can vary during the day. This is the only test which lets us accurately test your child's cortisol levels.

Preparing your child for the test

Your child can eat or drink normally before the test, unless you have been told otherwise. It is important that this test is done early in the morning. You will be asked to attend the hospital for 8am.

Changes to your child's medicines

- If your child takes **prednisolone**, this must be stopped 24 hours before the test. Your child can still take their morning dose the day before the test, but this needs to be before 8am. On the day of the test do not give your child their morning dose.
- If your child takes **hydrocortisone**, this must be stopped 12 hours before the test.
- If your child takes **any other steroids (including in creams or inhalers)**, please discuss this with your child's doctor.

If your child takes any other medicines, they can continue to take these as normal.

Giving your permission (consent)

We want to involve you in decisions about your child's care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This says that you understand what is involved and agree to have the treatment.

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

During the test

The nurse or healthcare assistant will do some checks to make sure it is safe for your child to have the test. They will take your child's weight and height, and measure their pulse rate, blood pressure, breathing rate and temperature.

Your child will have a small plastic tube (cannula) inserted into a vein in their 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 is used to give your child the test medicine (synacthen) and to take blood samples. We'll take 3 blood samples throughout the test.

Including preparation time, the test lasts for about 2 hours. Your child's nurse or healthcare assistant will monitor your child during the test.

Side effects

You should expect your child to feel well throughout the test, although occasionally patients feel flushed or nauseous (sick) during the test.

Very rarely, children can have an allergic reaction to the medicine. Your child will be carefully monitored throughout the test.

After the test

If your child takes regular steroids that were stopped before the test, it is very important that they start taking these again at the end of the test. This includes inhalers. Speak to your nurse if you need help with this.

We will take the cannula out and cover the area with a plaster, and make sure your child is safe to leave hospital.

Results are usually available after 4 to 6 weeks. We will contact you to arrange a phone appointment with one of the nurses to discuss the results. It is important that any steroid treatment continues as planned until you have this appointment, where we will guide you through the next steps.

If your child becomes unwell after the test, you should go to your local emergency department (A&E).

Tips to prepare 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](http://www.evelinalondon.nhs.uk) www.evelinalondon.nhs.uk.

Contact us

If you have any questions or concerns about the SST, please contact the paediatric endocrine nurses [email](mailto:EvelinaEAB@gstt.nhs.uk) EvelinaEAB@gstt.nhs.uk, or [phone](tel:02071887188) 020 7188 7188 extension 56129, Monday to Friday, 9am 5pm.

For questions about your child's appointment, please contact the paediatric endocrinology appointments team [email](mailto:paediatricappointmentsendocrinology@gstt.nhs.uk) paediatricappointmentsendocrinology@gstt.nhs.uk

For questions about your child's ward admission, please contact the paediatric admissions team [email](mailto:paediatricadmissionsofficers@gstt.nhs.uk) paediatricadmissionsofficers@gstt.nhs.uk

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](mailto:letstalkmedicines@gstt.nhs.uk) letstalkmedicines@gstt.nhs.uk



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