

Henoch-Schönlein purpura (HSP)

with kidney involvement

Overview

This infoKID topic is for parents and carers about children's kidney conditions.

This leaflet has the overview only.

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Henoch-Schönlein purpura (HSP) is a condition that affects different parts of the body. Tiny blood vessels in the body become inflamed or swollen. HSP happens in people of all ages, but is most often seen in children under 10 years of age. It is not contagious, so cannot be passed on to other people.

Children with HSP get red or purple raised spots on their skin. They may have pain in their joints and/or tummy, and they may feel sick and tired. Sometimes HSP also affects their kidneys, causing blood cells and proteins to 'leak' into the urine.

Usually, children with HSP do not need special treatment, but will need to be carefully monitored and may need to stay in hospital and/or take medicines.

Most children start to feel better after several days or a few weeks, and the rash and other symptoms disappear. HSP occasionally comes back, usually within a few months, and may need further treatment. A few children have long-term problems, especially when their kidneys are affected. They will need to be monitored and may need specialist treatment.



Symptoms and complications

Symptoms and signs

Common symptoms and signs of HSP include:

- **purpura** on the skin – a rash of red or purple spots that are raised and can be felt, especially on the feet, ankles, backs of legs, buttocks, lower back and arms; some children also have bruising
- pain and swelling in the joints – especially the ankles, knees and elbows
- pain in the abdomen (tummy) – children may feel sick (nausea), be sick (vomit) or have constipation or diarrhoea; sometimes there is blood or mucus in the stools (poo) or vomit
- feeling tired.



An example of a purpura (rash)

When the kidneys are affected, there may be other symptoms and signs:

- blood in the urine (**haematuria**) – you cannot always see the blood, but if there is a lot, the urine may be coloured red or dark brown (like a cola drink)
- Protein in the urine (**proteinuria**) – you cannot usually see the protein, though it can be found on a simple **urine test**
- sometimes, urinating less often or passing smaller amounts.

Complications

Some children have **complications** – health problems that happen because of the condition.

When the kidneys are involved, this may lead to:

- blood pressure that is too high (**hypertension**)
- swelling or puffiness in different parts of the body, especially around the eyes, legs and feet (**oedema**).

Very rarely, the kidney problems get worse quickly (**rapidly progressive glomerulonephritis**), and this may cause the kidneys to stop working over a short time (**acute kidney injury**).

Other complications include:

- in some boys, inflammation of the testicle (**orchitis**) – this may cause pain and/or swelling in the scrotum
- a blockage in the bowel (**intussusception**) – this needs surgical treatment
- very occasionally, the brain, spinal cord or lungs are affected.

Causes

HSP is linked to the **immune system**, which normally protects the body from infections and disease. Many children with HSP first get symptoms with or after an infection – usually in the throat or tonsils.

HSP is a **systemic condition** – this means it affects different parts of the body. The blood vessels swell and leak fluid into the tissues around the blood vessels, causing the symptoms.

When the kidneys are involved

Most of us have two **kidneys**. They are part of the urinary system, which gets rid of things that the body no longer needs, so that we can grow and stay healthy. The kidneys filter blood and remove extra water, salt and waste in urine (**wee**).

» More about the kidneys and urinary system

In about half of children with HSP, the kidneys are affected. The tiny blood vessels in the kidneys, which filter blood to remove extra water, salt and waste into the urine, become inflamed. This causes the kidneys to 'leak' blood cells and proteins into urine. This is sometimes called HSP nephritis.

Test and diagnosis

Your child will need some tests to diagnose HSP and find out whether he or she needs any treatment. Your child's doctor will examine your child, discuss his or her symptoms, and check his or her blood pressure. Your child will need one or more **urine tests**. He or she may need other tests, such as **blood tests** and an **ultrasound scan**.

A few children need a **biopsy** of the skin and/or kidneys – a tiny piece of tissue from the skin or kidney is removed from the body with a needle and examined under microscopes. Special medicines are used so your child does not feel any pain or can sleep through the procedure.

Treatment

Where will my child be treated?

Your child will probably be treated in a **paediatric unit**, a special part of your hospital for children. He or she will be looked after by a **paediatrician**, a doctor who treats babies, children and young people.

Your child may need to stay in hospital for a few days or longer. However, children with HSP usually have most of their care as **outpatients**, visiting the hospital during the day.

A few children with HSP are referred to a **paediatric renal unit**, a specialised unit that treats babies, children and young people with kidney problems and may be in a different hospital to your own. Your child will be looked after by a team, including a **paediatric nephrologist**, a doctor who treats children with kidney problems.

About treatment

Most children do not need special treatment. To relieve pain, your child may take medicines such as paracetamol (e.g. Calpol®).

→ **Do not give your child ibuprofen (e.g. Brufen) as it can cause further damage to his or her kidneys.**

Some children need to make temporary changes to what they eat or drink, or take medicines to try to reduce the amount of protein lost in their urine, control their blood pressure or treat any complications.

About the future

Will my child get better?

In most children, the symptoms and signs of HSP go away within one month, though some children will have problems for three months or even longer. The purpura (rash) on the skin disappears – and usually does not leave any scars – and the joint pain and tummy pain go away. This is called remission.

In a few children, the symptoms and signs come back, usually within one year. This is called a **relapse**. These children may need further treatment.

Follow-up

Your child will probably need to be seen regularly by a doctor for some weeks, to check for any problems with his or her kidneys. After your child recovers, he or she may need follow-up appointments once a year for urine tests and blood pressure measurements.

If your child has **acute kidney injury** (when the kidneys stop working properly), he or she will need follow-up throughout their life.

Long-term effects

Most children have no long-term effects from HSP.

Some children continue to have **haematuria** (blood in their urine) – this usually cannot be seen but is picked up on a urine test. Up to 15 children in 100 continue to have proteinuria (protein in the urine) one year after the initial episode of HSP – they will need to be monitored.

A small number of children (less than 5 in 100) with HSP have long-term problems with their kidneys – this is called **chronic kidney disease (CKD)**. Their kidneys stop working as well as they should – this happens slowly over many years. If your child has CKD, you will learn more over time about how to help manage the condition, and what to expect.

» **More information HSP on www.infoKID.org.uk**

Your notes and contact information

www.infoKID.org.uk



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