

Most children that require dialysis will recover their kidney function. A transfusion of blood is very often needed initially due to the rapid break down of red cells (causing anaemia).

- **A transfusion of platelets** (cells that stop bleeding) may be necessary if your child requires a procedure in theatre.
- **Plasmapheresis** is a special form of treatment which may be used if your child is very ill. This treatment washes out the toxins and waste products from your child's blood.

On discharge from hospital

Most children with HUS recover completely. After care includes:

- Your child will need to take iron and folic acid (to treat anaemia)
- Your child may take a little while to recover full energy levels.
- Repeat blood tests will be necessary.
- A kidney test (GFR) may be performed one year after admission, to assess kidney function
- Yearly checkups with your GP (urine and blood pressure checks)



Further information please contact your GP or the Nephro-Urology Ward, if you have any questions or concerns;

Phone: (01) 409 6974

Additional Information

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Children's Health Ireland
at Crumlin

Information for parents/ carers and
children who have

Haemolytic Uremic Syndrome (HUS)



MAIN SWITCH: 01 409 6100

Introduction

HUS is a disorder which affects your child's kidneys. It is the most common cause of acute renal failure in childhood. Most cases of HUS occur after an infection of the digestive system by *Escherichia coli* 0157 bacterium, (gastroenteritis).

This bacteria is found in contaminated foods like meat, organic vegetables, ground meat, dairy products and juices. Lakes or water contaminated with faeces is another source. Minced beef and dairy produce are the most commonly implicated foods. Person to person spread and contact with live stock have also been documented as modes of transmission of infection (also known as hamburger disease and barbecue syndrome). This condition is more common in spring and summer.

This infection of the digestive tract is called gastroenteritis and may cause your child to experience:

- Severe stomach cramps
- Vomiting
- Diarrhoea (sometimes contains blood)
- Dehydration
- Fever

This illness usually lasts seven to 10 days. Most children who experience gastroenteritis recover fully in 2-3 days and do not develop HUS. 5-10% of young children develop a very serious complication several days after gastroenteritis, resulting in kidney failure.

What happens in my child's body?

During the gastroenteritis infection, toxins are released. These toxins damage the delicate lining of the very small vessels within the body. Once damaged, these vessels become swollen and blood cells passing through the vessels are destroyed. These damaged blood cells clump together and block small vessels in the kidney known as the glomeruli. This leads to problems with the kidneys' ability to filter and eliminate waste products. The kidneys are unable to remove fluid and wastes that they would normally do, resulting in kidney failure.

In severe cases, this kidney failure may require dialysis to take over the kidneys' job of filtering wastes and excess water from the blood. Most children recover without any permanent damage to their health. However, in a minority of cases, HUS can be more serious.

What are the symptoms of HUS?

Usually your child will have experienced gastroenteritis 1/2 weeks before developing HUS.

- Pale
- yellow- appearance to their skin
- irritable and listless
- Bruising: small unexplained bruises or bleeding
- Anaemia (low iron level)
- Reduced urine output
- Unable to maintain normal blood sugar
- Confusion, irritability (if blockages occur in small brain vessels)

How is HUS treated?

Symptoms are treated as they arise and may include the following:

Admission to hospital, your child may be hospitalised for approximately 3 weeks but this varies according to your child's symptoms.

Careful attention to **fluid intake**. This may include intravenous fluids (a drip).

Blood tests

Observation of your child (blood pressure, temperature, heart rate)

Diet and calories are very important to stabilise blood results and aid recovery. A dietician will discuss this with you and your child. Additional feeding via a tube may be required.

Dialysis may be required in cases of severe kidney failure. Dialysis will do the work of your child's kidney. It may be needed for 1-3 weeks; however it may take longer in some cases.

