

Emergency and Urgent Care for Children - A Survival Guide

Midlands Critical Care & Trauma Networks 



West Midlands Ambulance Service 
NHS Foundation Trust



UNIVERSITY OF
BIRMINGHAM

WEEK 2

Rashes - Parent Information Leaflet

Rashes are really common in children and generally can be divided into acute and chronic rashes.

One of the commonest chronic (long term) rashes is eczema. Children with eczema will have dry, itchy skin and parents become well acquainted with the labour intensive treatment that may be needed. The essence of treating eczema is to get moisture in to the skin and this may mean applying moisturising creams up to 8 times per day. The skin seems to suck the moisture in and as a rule of thumb, if at any point it feels dry, more moisturiser is needed. Eczema can be really itchy and children need to be discouraged from scratching (easier said than done). Antihistamines (drugs like Piriton) are reserved for night time, capitalising on one of their side effects (they can make children sleepy) rather than being particularly effective at reducing the itch. Steroid creams will often have an important role in reducing the inflammation in the skin. There are very real concerns raised by parents about the use of steroid creams and the potential harmful effects of them, but used carefully, in the right conditions they are often pivotal in getting the eczema under control.

Many children with eczema can be managed in General Practice but some will need referral to a skin specialist. People will often question the role of allergy in this rash especially in children who do not seem to respond to treatment. This is sometimes worth exploring but in any cases will not yield a magical solution. The good news is that most children will grow out of eczema.

Eczema can also become infected, wither with common skin bugs (like staphylococcus) or viruses like the cold sore virus. You can't always protect children from these but it is important to get a child checked out if the rash suddenly becomes worse, is weeping or has punched out looking lesions in it, or the child themselves is unwell with a worsening rash.

Eczema is an example of a chronic, itchy rash, and it's the itchy bit here that's important. There are not many rashes that are itchy apart from eczema, contact dermatitis (when you see a local skin reaction to something that the person is sensitive to) and another common one, scabies. Scabies is caused

by a tiny mite that burrows in to the skin. The rash is a reaction to the mite and is often intensely itchy (particularly at night). Several members of the same family may have the same rash but this is not always the case.

Scabies is often mis diagnosed as the rash itself can take several forms. The history is all important here as there are few rashes that cause the intense itchiness of scabies. Whilst the idea of a mite causing a rash may be abhorrent to many people, this is a common problem and does not mean that the child lives in a dirty house (any more than that children with head lice have dirty hair). The treatment is with a lotion that will kill the bug but not necessarily get rid of the rash straight away. A second application of the lotion after 2 weeks may be needed.

Now let's have a look at acute rashes

Urticaria (or hives)

This is a rash that may be associated with infection but is often seen as a reaction to a viral illness (or just comes up out of the blue). The rash looks a bit like a nettle rash with raised lesions with a red border and a pale centre that seem to move around the body over time. This 'geographical' feature is important in the diagnosis; often the rash will change while the child is in the waiting room. Urticaria is rarely a cause for concern and may respond to antihistamine treatment. Sometimes it may herald the start of another condition but usually it is an alarming looking but relatively benign condition. Of course urticaria may present as part of an allergic response. In this situation it is not the urticaria that is a problem rather the other symptoms of allergy that may affect the child (wheezing, abdominal pain etc). But in my experience most urticaria is not caused by allergy although parents will often wrack their brains to think of something that may have set it off.

Generalised viral exanthem

This is the posh medical term for a widespread red raised rash over the body, often misdiagnosed as measles or rubella. One of the ways to differentiate a simple viral rash from measles, is that In measles children will be really unwell, miserable (really miserable, not just a bit sad) and hot with red eyes (conjunctivitis).

Measles is uncommon but with parent fears over MMR vaccination in the recent past, there are un-immunised children out there, and we do see cases of measles from time to time. Most children with measles get over it with few complications but during the infection they may get otitis media (a painful middle ear infection), a sore throat and in some cases, pneumonia (nasty chest infection). There are some rare complications of measles that can be life changing including SSPE (a progressive brain damage that can appear some years after the initial infection), or inflammation of the optic nerve leading to blindness.

So we have already said that most children with a viral exanthema will be reasonably well. They may be hot and they may have other mild symptoms of the virus that caused the rash, but that should be about the limit of it. In a child with a widespread red rash who appears really unwell, a medical check is a good idea.

Gianotti Crosti Syndrom

I had to include this as it has a really cool name. Basically this is another rash that tends to come on in response to a viral infection and causes spots (or papules to give them their technical term) to appear on the arms and the legs. The rash may be a bit itchy but not desperately so. The bad news is that there is no treatment for this rash (although if it is very itchy a low dose steroid cream may help) and it will go away on its own. This may take several weeks

Chicken pox

A classic childhood illness with an incubation period of 14-16 days, this viral infection may start with the child feeling a bit under the weather before developing spots on the tummy or back. These spots start off as papules (raised red spots) which then turn vesicular (fluid filled, like tiny blisters). The rash will continue to develop over a few days and children need to be off school for 5 days after the start of the rash.

Fever with chicken pox is generally present for the first 48 hours. A child who still has fever after this time needs to be checked out to rule out infection in the skin or other more serious complications. A very rare complication of chicken pox is necrotising fasciitis (a flesh eating bug). This is a medical emergency and presents with a child who looks very unwell and has a red/bruised, very tender patch on the skin. Children with this condition need to be admitted to hospital for urgent treatment which includes antibiotics and an operation to take away the dead skin.

Some medical studies have suggested a link between the use of ibuprofen with the development of necrotising fasciitis and for this reason, I would *steer clear of ibuprofen in children with chicken pox.*

Henoch Schonlein Purpura

Another diagnosis that carries with it a wicked name, this condition can present at any age with a bruising type rash, mostly on the legs and buttocks. It usually follows a viral infection and the rash can sometimes be confused with the more serious meningococcal septicaemia. In HSP, children are generally pretty well. They may have painful, swollen joints but these will usually respond to paracetamol or ibuprofen.

HSP is a vasculitic condition (inflammation of the blood vessels) and there can be inflammation in other parts of the body too. The commonest place is the kidneys and children with HSP will often have mild inflammation of their kidneys. This rarely leads to any long term damage. One thing to look out for in a child with HSP is abdominal pain. There are rare abdominal problems associated with HSP and these need to be checked out by a medical

professional. Parents should not make the diagnosis of HSP themselves, rather get their presumed diagnosis checked out by the GP.

Meningococcal Disease

Ok so here's the big one, the meningitis bug, a name that strikes fear into the hearts of parents. The meningitis bug can cause sepsis (blood stream infection), meningitis (inflammation around the brain) or a combination of both. Of these, the most serious (maybe surprisingly) is meningococcal sepsis.

Children may initially appear to have a simple viral type infection and often a non specific rash. As the infection takes hold the other signs become apparent; the child will be unwell looking with a fever and a high heart rate and breathing rate. The rash may initially be only on a small area of the skin so it is important to look all over the body (don't forget the armpits as I remember one case where there were two spots in the armpit and an hour later the child was covered in a non blanching rash). The spots are described as non blanching which means that they do not disappear when a glass is pressed on them or (more easy than finding a glass in a hurry) put a finger either side of the spot stretch the skin the skin over the spot. A non blanching spot will not disappear.

Now not all non blanching rashes are caused by meningococcal disease (vomiting can cause these spots to appear on the face, a problem with the blood clotting can cause a non blanching rash) but it important to get it checked out. But keep things in perspective. Vaccination has reduced the incidence of meningococcal disease and, in those that get it, early detection can lead to treatment that in most cases will enable a full recovery.

I could go on and on about rashes as they are a really common problem in children and do cause a lot of anxiety in parents. A full description of even the commonest rashes is outside the scope of this course so I have provided a few important examples in the hope that this gives you and idea of possible causes when faced with a child with rash.