



Dr Wolfgang Muller (Consultant Paediatrician)

Parent Information Guide:

Vaccination granuloma (lump after an injection)

A vaccination granuloma is a harmless lump that can develop under the skin after a vaccine injection. It is usually caused by the body reacting to aluminium, which is used in some vaccines to help the immune system respond well. These lumps are benign, but they can be very itchy and can last for months or sometimes years before gradually settling.

What does it look and feel like?

A vaccination granuloma usually feels like a small, firm lump deep under the skin at the site where the vaccine was given, often on the thigh or upper arm. The main symptom is itching. Some children scratch so much that the skin becomes sore, darker, thicker, or more hairy over the area. The lump may not appear straight away and can show up weeks or even months after the injection, which is one reason it is often not recognised at first.

Why does it itch more at some times?

Families often notice that the area becomes much itchier from time to time. This can happen particularly during a viral illness, and it can also flare after later vaccinations, even when those vaccines are given at a different site. Although this can be alarming, it does not usually mean anything dangerous is happening.

Is it dangerous?

No. Vaccination granulomas are not cancer, they are not infectious, and they do not usually need scans, blood tests, or surgery if the story and examination are typical. The biggest problem is discomfort from itching and the worry caused by finding a persistent lump. The long-term outlook is good, even though the symptoms can be frustrating.

Does this mean my child is allergic to vaccines?

Not in the usual sense. Many children with these itchy nodules have sensitivity to aluminium on patch testing, but this is different from the immediate severe allergic reactions that happen within minutes of a vaccine. A vaccination granuloma does **not** mean your child should automatically stop routine immunisations. In general, children can continue to be vaccinated, though the clinician may take the reaction into account when planning future vaccines.



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How is it treated?

Treatment is aimed at easing the itch rather than removing the lump. Try to reduce scratching, keep nails short, and use simple soothing measures such as a cool compress if helpful. If the skin over the lump becomes inflamed or excoriated, your clinician may suggest treatments to calm the skin and reduce itch. The lump itself usually settles gradually over time.

When should I seek medical advice?

Please ask for review if:

- the diagnosis is uncertain
- the lump is rapidly enlarging, very painful, hot, or red
- there is discharge from the area
- your child is unwell in themselves
- the itching is severe or disturbing sleep
- you are worried about future vaccinations.

A clinician can confirm whether the lump fits with a vaccination granuloma and advise on symptom relief. Typical vaccination granulomas are itchy rather than painful, and children are otherwise usually well.

Key message

A vaccination granuloma is a recognised, harmless reaction at an injection site. It can itch a lot, may flare up during viral illnesses, and can last a long time, but it almost always improves with time.

Written by: Dr W Muller Date: 01/04/2026

Parent information on Vaccination granuloma:

<https://drwmuller.com/information-for-parents-carers/>

See: **My Baby:** Vaccination granuloma