Royal United Hospital Bath NHS
NHS Trust

RUH Information for Patients

Immunisation of Egg-allergic Children

Updated Oct 2011

General Advice

We recommend that children are fully immunised to protect them from serious infections. Children with egg allergy need to take special precautions with influenza and yellow fever vaccine but otherwise they should be immunised (vaccinated) in the normal way. Allergic reactions to vaccines are extremely rare.

Occasionally it is felt to be sensible to have some immunisations in a hospital setting. This is considered if children have had a very severe anaphylactic reaction involving significant breathing problems etc. These children should be under the care of the allergy team and their case can be discussed individually. Children who have had an allergic reaction to a previous dose of vaccine will also need immunisation in hospital.

MMR – measles mumps and rubella

The MMR vaccine has an excellent safety record in egg-allergic children. It can be given to all egg-allergic children as a routine procedure in primary care. This is the current advice of specialist medical organisations such as the British Society for Allergy and Clinical Immunology and the American Academy of Pediatrics. The MMR vaccine is grown on cultured-embryo-chick fibroblasts and is generally free of hen's egg protein. When traces of egg protein are found, the protein is highly processed and the concentrations are too low to represent a risk. Virtually all egg allergic infants and children can therefore be immunised in primary care in the normal way.

Influenza ('Flu')

Many influenza vaccines contain very small amounts of egg protein. Different flu vaccines are produced each year depending on the type of flu virus which is most common that year. A list of the vaccines and their egg content is published each year in the online 'Green Book' which is the vaccination handbook used by all doctors in the UK.

Some years there are egg-protein free vaccines available, these vaccines can be safely given to egg allergic people irrespective of the type of reaction they have had to egg. Some vaccines are classed as very low egg protein (<0.12micrograms per ml/ <0.06 micrograms per dose). Research has shown that these can be given to those with mild egg allergy safely in general practice even if the person has mild asthma as well.

For those with severe egg allergy (those who have been wheezy or had anaphylaxis to egg and are not outgrowing their egg allergy) or those with mild egg allergy but significant asthma can be considered for low-egg flu vaccine given in hospital. Significant asthma is asthma needing treatment in addition to salbutamol and inhaled steroids or very poor control on this regime.

More detailed information about this is available from the BSACI website (British Society for allergy and clinical immunology: www.bsaci.org) or the 'Green Book'

Yellow fever

Yellow fever vaccine contains egg protein. Egg allergic children should generally not be given yellow fever vaccine. If travel is to countries requiring a yellow fever certificate a letter from your doctor stating the reason for not having the vaccine can be obtained. If the risk from travel to a country with the disease is felt to be high, such as prolonged stays in areas where yellow fever is found, this can be discussed in more detail in the allergy clinic or at a specialist travel clinic.

References

1. BSACI Recommendations for Combined Measles, Mumps and Rubella (MMR) Vaccination in Egg-Allergic children 2007
2. The Red Book: Report of the Committee on Infectious Diseases. American Academy of Pediatrics 2009
3. National Travel Health Network and Centre: http://www.nathnac.org for advice about Yellow fever
4. Influenza immunization in egg allergy: an update for the 2011–2012 season. M. Erlewyn-Lajeunesse; J. S. A. Lucas; J. O. Warner. Clinical and Experimental Allergy. Sept 2011.
5. Immunisation against infectious disease - 'The Green book' Department of Health. Accessed 21/10/2011 from 'http://www.dh.gov.uk/dr_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_130757.pdf

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