

Australian Paediatric Surveillance Unit

STUDY PROTOCOL

Anaphylaxis following food ingestion in children

BACKGROUND

Anaphylaxis is a life threatening, acute allergic reaction requiring prompt medical treatment. In children the most common triggers of anaphylaxis are foods, insect bites and drugs. Food allergy is common in childhood. Between 6 and 8% of children younger than three years suffer from food allergies. However the incidence of anaphylactic reaction to food and the causative allergens in Australian children is not known.

Most paediatric allergists agree that the prevalence of food allergies is increasing but epidemiological data is lacking to substantiate this belief. The British Paediatric Surveillance Unit has recently completed a two year national survey of acute anaphylaxis in children and the Canadian Paediatric Surveillance Unit is currently investigating the epidemiology of food anaphylaxis. The APSU study represents the first population based study of food anaphylaxis in Australian children.

Food avoidance is the key to managing food allergies. However avoidance can be difficult because of hidden or accidental sources of exposure. With better knowledge of likely sources of exposure, education can be directed to parents and carers and guidelines can be formulated for pre-schools and schools.

STUDY OBJECTIVES

The objectives of the study are to:

- estimate the incidence of anaphylactic reactions to food in Australian children and their outcome
- describe clinical features of anaphylactic reactions to food and their management
- identify probable causative allergens
- identify steps which might be taken to assist carers and families regarding acute management.

CASE DEFINITION

Any child less than 15 years of age who had anaphylactic reaction to food. Please report any child you have seen in the last month who

- *was admitted to a hospital because of anaphylactic reaction to food*
OR
- *was admitted for observation to an accident & emergency department for an anaphylactic reaction to food*
OR
- *presented to your rooms following an anaphylactic reaction to food*
OR
- *died following an anaphylactic reaction to food or to an unknown allergen which might be a food.*

Anaphylaxis is defined as an immediate life-threatening, multisystem hypersensitivity response involving at least two of the following four systems:

- i.skin: rash (angioedema, urticaria)*
- ii.respiratory: airway obstruction (stridor, wheeze)*
- iii.gastrointestinal (vomiting, abdominal pain, diarrhoea)*
- iv.cardiovascular compromise (cyanosis, hypotension)*

Note: The appropriate treatment for anaphylaxis is Adrenalin.

Exclusion Criteria

Children should not be reported if they have:

- symptoms of allergic reaction that are manifest by asthma or wheeze alone
- symptoms of allergic reaction that are mild and did not require treatment.

INVESTIGATORS (*Principal Investigator)

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