Fact Sheet

Information For Referrers: Large Local Allergic Reactions to Insect Stings

Patients who have large local swellings after bee, wasp or ant stings usually do not need to be referred to a specialist.

Stings from bees, wasps or stinging ants have the potential to cause anaphylaxis, however some patients suffer from ***local swelling only, without any systemic features.*** This is seldom dangerous (unless the sting is on the inside of the airway). Venom immunotherapy is usually not warranted, and there is no indication for an Epipen.

LARGE LOCAL ALLERGIC REACTIONS

Local reactions involve pain, itch and swelling in the area of the sting. Swelling spreads from the area of the sting, for example along a limb, but remains contiguous. Swelling varies in extent and severity, may arise over minutes, hours, or up to a day, generally peaks within 24hrs, and may persist for several days or more than a week. In some cases it can cause considerable pain and (temporary) disability. There may be local vesiculation. The condition may resemble cellulitis, requiring clinical judgement on whether to prescribe an antibiotic. Large local reactions may be associated with mild systemic malaise, usually arising many hours after the sting. There are no significant early systemic features.

ANAPHYLAXIS

Any of the following features occurring within the first hour after a sting are markers of a systemic reaction:

- Cutaneous - flushing, erythema, pruritus, urticaria, swelling in locations remote from the sting
- Systemic - hypotension (faintness, dizziness, palpitations and tachycardia, visual disturbance, mental obtundation, collapse), chest tightness, bronchospasm, laryngeal or oropharyngeal oedema, nausea, vomiting and abdominal cramps with or without diarrhoea, acute rhinitis.

Systemic features such as hypotension may occur in the absence of cutaneous features.
Systemic reactions may occur in conjunction with large local allergic reactions.
Any early systemic features warrant Epipen prescription and specialist referral

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NATURAL HISTORY OF BEE STING ALLERGIC REACTIONS

- Anaphylaxis may occur after a sting, without any history of reactions to prior stings.
- The risk of a systemic reaction to a sting in those who have a history of large local reactions is greater than in those who have never had a prior reaction, but is still relatively low (5-10%) and is not considered sufficient to warrant an Epipen or venom immunotherapy.
- Patients often worry about threat to airway with large local reactions, but stings on the face or neck cause mainly external swelling, and airway involvement is unlikely or would occur slowly. A sting in the oropharynx or larynx from a swallowed insect is very dangerous but this is an extremely rare event and the risk is considered too low to warrant an Epipen.

MANAGEMENT

In patients who suffer local swellings with no generalised or systemic features –

- Antihistamines taken early after the sting are often used and may partially alleviate swelling in some cases, but are often ineffective. Once swelling has arisen, antihistamines are of little benefit.
- Discomfort from mild to moderate swelling may be alleviated by elevation, ice packs, paracetamol, montelukast or NSAID.
- Severe swelling with pain or disability may be reduced by a short course of high dose prednisolone (start 50mg, stop or taper rapidly when swelling has reduced, 3-5 days only).

Summary:

DO NOT REFER patients with large local swelling reactions without systemic or atypical features- treat with early antihistamines, analgesics, prednisolone if severe.

REFER TO CLINICAL IMMUNOLOGY/ALLERGY SPECIALIST:

- Immediate systemic reactions of any severity after a bee, wasp or ant sting.
- Atypical severe delayed reactions.

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For more information

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