Drug allergy overview

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/drug-allergy
NICE Pathway last updated: 23 November 2020

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.

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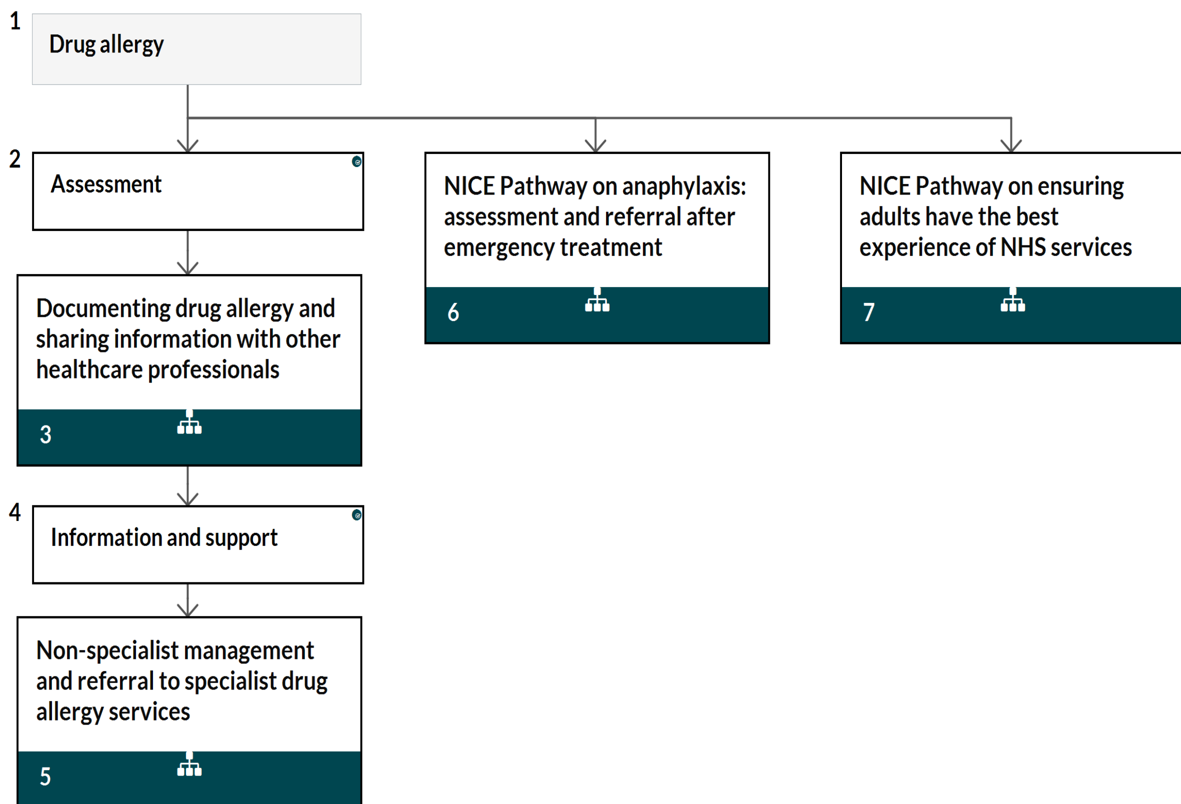

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1 Drug allergy

No additional information

2 Assessment

When assessing a person presenting with possible drug allergy, take a history and undertake a clinical examination. Use signs and allergic patterns of suspected drug allergy with timing of onset [See page 6] as a guide when deciding whether to suspect drug allergy.

Be aware that the reaction is more likely to be caused by drug allergy if it occurred during or after use of the drug and:

- the drug is known to cause that type of reaction **or**
- the person has previously had a similar reaction to that drug or drug class.

Be aware that the reaction is less likely to be caused by drug allergy if:

- there is a possible non-drug cause for the person's symptoms (for example, they have had similar symptoms when not taking the drug) **or**
- the person has gastrointestinal symptoms only.

See the NICE Pathway on gastrointestinal conditions.

Measuring serum tryptase after suspected anaphylaxis

After a suspected drug-related anaphylactic reaction, take 2 blood samples for mast cell tryptase in line with the NICE Pathway on anaphylaxis: assessment and referral after emergency treatment.

Record the exact timing of both blood samples taken for mast cell tryptase:

- in the person's medical records **and**
- on the pathology request form.

Ensure that tryptase sampling tubes are included in emergency anaphylaxis kits.

Measuring serum specific immunoglobulin E

Do not use blood testing for serum specific IgE to diagnose drug allergy in a non-specialist

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setting.

Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

1. Documentation using the structured assessment guide

3 Documenting drug allergy and sharing information with other healthcare professionals

See Drug allergy / Documenting drug allergy and sharing information with other healthcare professionals

4 Information and support

Discuss the person's suspected drug allergy with them (and their family members or carers as appropriate) and provide structured written information (see documenting new suspected drug allergic reactions). Record who provided the information and when.

Provide information in line with the NICE Pathway on patient experience in adult NHS services.

Ensure that the person (and their family members or carers as appropriate) is aware of the drugs or drug classes that they need to avoid, and advise them to check with a pharmacist before taking any over-the-counter preparations.

Advise people (and their family members or carers as appropriate) to carry information they are given about their drug allergy at all times and to share this whenever they visit a healthcare professional or are prescribed, dispensed or are about to be administered a drug.

Explain to people with a suspected allergy to a non-selective NSAID (and their family members or carers as appropriate) that in future they need to avoid all non-selective NSAIDs, including over-the-counter preparations. For other recommendations on allergy to NSAIDs see non-specialist management and when to refer to a specialist drug allergy service.

For recommendations on providing information after specialist drug allergy investigations see providing information to people who have had specialist drug allergy investigations.

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Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

2. Advice about carrying personal structured drug information

5 Non-specialist management and referral to specialist drug allergy services

See Drug allergy / Non-specialist management and referral to specialist drug allergy services

6 NICE Pathway on anaphylaxis: assessment and referral after emergency treatment

See Anaphylaxis: assessment and referral after emergency treatment

7 NICE Pathway on ensuring adults have the best experience of NHS services

See Patient experience in adult NHS services

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Signs and allergic patterns of suspected drug allergy with timing of onset

Note that these boxes describe common and important presenting features of drug allergy but other presentations are also recognised.

Immediate, rapidly evolving reactions

<table>
<tr><td>Anaphylaxis – a severe multi-system reaction characterised by:
• erythema, urticaria or angioedema and
• hypotension and/or bronchospasm</td><td rowspan="3">Onset usually less than 1 hour after drug exposure (previous exposure not always confirmed)</td></tr>
<tr><td>Urticaria or angioedema without systemic features</td></tr>
<tr><td>Exacerbation of asthma (for example, with NSAIDs)</td></tr>
</table>

Non-immediate reactions without systemic involvement

<table>
<tr><td>Widespread red macules or papules (exanthem-like)</td><td rowspan="2">Onset usually 6–10 days after first drug exposure or within 3 days of second exposure</td></tr>
<tr><td>Fixed drug eruption (localised inflamed skin)</td></tr>
</table>

Non-immediate reactions with systemic involvement

DRESS or drug hypersensitivity syndrome characterised by:	Onset usually 2–6 weeks after first drug exposure or within 3 days of second exposure

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• widespread red macules, papules or erythroderma • fever • lymphadenopathy • liver dysfunction • eosinophilia	
Toxic epidermal necrolysis or Stevens–Johnson syndrome characterised by: • painful rash and fever (often early signs) • mucosal or cutaneous erosions • vesicles, blistering or epidermal detachment • red purpuric macules or erythema multiforme	Onset usually 7–14 days after first drug exposure or within 3 days of second exposure
Acute generalised exanthematous pustulosis characterised by: • widespread pustules • fever • neutrophilia	Onset usually 3–5 days after first drug exposure
Common disorders caused, rarely, by drug allergy: • eczema • hepatitis • nephritis • photosensitivity • vasculitis	Time of onset variable

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Glossary

IgE

immunoglobulin E

NSAID

non-steroidal anti-inflammatory drug

Sources

Drug allergy: diagnosis and management (2014) NICE guideline CG183

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

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Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

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