

Case study - investigation of anaesthetic reactions

Presentation:

- 65 year old lady
- Previous GA x 3 (uneventful)
- GA for lumpectomy
- Fentanyl, propofol, lignocaine, suxamethonium
- Marked bradycardia, brief period asystole
- Resuscitated
- No rash but some tongue & facial swelling
- ECG - acute anterior MI

What do we need to find out?

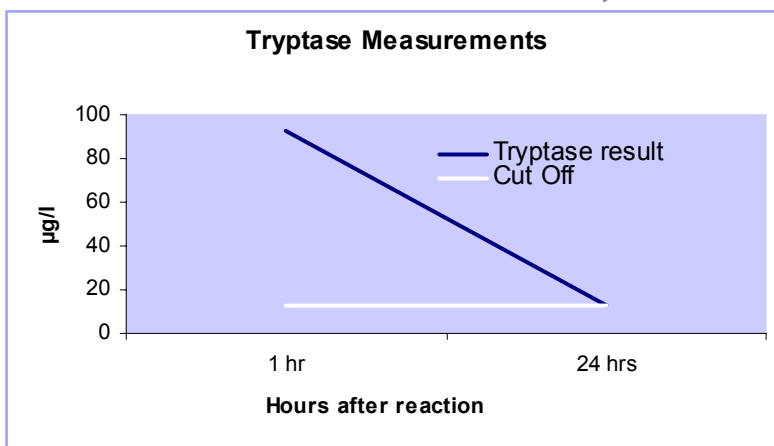
- Has an 'allergic' reaction occurred?
- Anaphylaxis or anaphylactoid reaction?
- What is the causative agent?
- What are the potentially cross reactive drugs?
- Are there any 'Safe' alternatives?

Questions to ask

What blood tests would you recommend in this lady?

What investigations would you do in suspected anaesthetic reactions in general?

Laboratory blood test results



Specific IgE antibody levels	
Allergen	kU _A /l
Suxamethonium	5.55
Latex	<0.35

Less than 0.35 is considered negative

Question

Skin prick testing results

- 7mm weal with suxamethonium
- 2-3 mm weal with atracurium & mivacuronium
- Negative to latex, fentanyl, propofol & other muscle relaxants

Diagnostic summary

- The raised tryptase confirms that a mast cell degranulation event, either anaphylactic or anaphylactoid, has occurred.
- The raised IgE and positive skin test to suxamethonium indicates a diagnosis of IgE mediated anaphylaxis to suxamethonium.
- Positive skin tests to atracurium and mivacuronium suggest cross reactivity and indicate that these drugs should be avoided in future.
- Negative skin prick test results against other muscle relaxants identifies suitable (or safer) alternatives for future use.