

“It’s a-gal!” - A case report of alpha-gal syndrome in the obstetric patient

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Case Description

A 31 year old primigravida who was 33 weeks pregnant, with ruptured membranes from 24 weeks and intermittent PV bleeding reported a history of alpha-gal syndrome, diagnosed in childhood. She reported ongoing symptoms of allergy in adulthood following inadvertent consumption of mammalian products. Our team were contacted by the obstetric team querying the significance of the syndrome.

What is alpha-gal syndrome (AGS)?

AGS is an IgE mediated allergy to galactose- α -1,3-galactose, a carbohydrate found in mammalian tissue. Sensitisation typically occurs via tick bite. Re-exposure results in allergic symptoms which vary in severity and time of onset. More immediate reactions have been noted with parenteral administration and patients can present with anaphylaxis. Previously, cases within the UK were typically found in those returning from foreign travel and linked to bites from the lone star tick. However, a number of recent case reports have confirmed AGS caused by the “*Ixodes ricinus*”, native to the UK¹.

What happened next?

Our pharmacy team began to contact individual manufacturers requesting information regarding allergens. This took **9 days** to receive. Alpha-gal IgE was sent, took 1 week to be reported and was undetectable. Given her history she requires further immunology review and investigation. The anaesthetic plan evolved over time.

Final Plan: Analgesia - IM morphine or epidural (levobupivacaine 0.1% and fentanyl 2mcg/ml). Anaesthesia - spinal (0.5% heavy bupivacaine, morphine, fentanyl), 0.9% saline, avoid cefuroxime. Morphine used should be preservative free regardless of route of administration. Our stocked brand of propofol (B Braun) was found to be safe as glycerol was plant derived.

What’s the anaesthetic relevance?

A brief literature search identified drugs that can cause symptoms in patients with AGS. Many standard anaesthetic drugs are safe but hidden ingredients can cause allergic reaction. Ingredients such as glycerin may be derived from animals or plants. Source information is not readily available and varies between brands². We sought advice from our pharmacy and immunology teams.

Potential triggers:

- Propofol
- Morphine
- Enoxaparin
- PO Paracetamol
- Gelatin
- Glycerin
- Heparin
- Mg stearate
- Lactic acid

Outcome: Our patient received an epidural and had a vaginal delivery of a baby girl

Learning points:

- AGS cases have increased in the UK
- Symptoms vary but we should be prepared to treat anaphylaxis¹
- Most standard anaesthetic drugs are safe but hidden ingredients have the potential to cause allergic reaction in these patients²
- Information regarding risk of specific drugs can be challenging and time consuming to obtain
- Early identification, MDT approach and a clear plan result in a good outcome

References

1. Douglas JDM, Furrie E, Jones S. Alpha-gal syndrome in general practice: red meat food allergy caused by UK ticks. BJGP. 2025; 75 (753): 186-188 <https://doi.org/10.3399/bjgp25X741309>
2. Leder J, Diederich A, Patel B, et al. Perioperative Considerations in Alpha-Gal Syndrome: A Review. Cureus. 2024; 16(1), e53208 <https://doi.org/10.7759/cureus.53208>

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Lead and shared with permission of our patient with thanks