

Anaesthetic management of a parturient presenting with suspected oxytocin allergy

Sir,

Oxytocin is a rare cause of anaphylaxis during pregnancy and few reports of such anaphylaxis have been reported. But there have been no reports of the management of women with documented or suspected oxytocin allergy presenting for subsequent deliveries. It remains unclear whether oxytocin primarily triggers an allergic response or it complements the antigenicity of another antigen, such as latex. Considerable homology in the protein sequences between oxytocin and latex antigens has been reported.^[1] The primary concerns include the avoidance of anaphylactic reactions and the control of uterine tone while avoiding oxytocin that remains the primary uterotonic agent. We report the anaesthetic management of a second gravida with history of anaphylaxis to oxytocin, who presented for elective caesarean section at term gestation. Through this report, we highlight the management of parturients presenting with known or suspected oxytocin allergy presenting for subsequent pregnancies. Avoidance of oxytocin in such cases along with the judicious use of other uterotonics will help improve both the maternal and foetal outcomes.

A 33-year-old second gravida with previous caesarean section presented at 37 + 3 weeks of gestation for elective caesarean section. She was a known case of chronic urticaria on treatment with anti-histaminics. Her past antenatal history was significant for anaphylactic shock and angioedema immediately following oxytocin infusion. A putative diagnosis of oxytocin allergy was made and managed with intravenous hydrocortisone and adrenaline. She was intubated and mechanically ventilated and was later taken up for emergency caesarean section because of foetal distress, elsewhere. Further diagnostic details were not available from her past medical records. Two years later, she presented to our institute for elective caesarean section and considering her term gestation, we decided to postpone the work-up for allergy after the delivery. Her history was noted from her previous records and it was decided to avoid oxytocin and latex-containing equipment and gloves. Chlorhexidine and β -lactam antibiotics were also avoided because the

exact cause of anaphylaxis in the previous pregnancy could not be conclusively determined. She received 100 mg intravenous hydrocortisone^[2] before the procedure and her bladder was catheterised with a silicone catheter. Spinal anaesthesia was given with 1.8 mL of hyperbaric bupivacaine. Following delivery, 0.2 mg methylergometrine diluted to 10 mL was slowly administered intravenously. Her vital parameters were stable and there was no uterine atony throughout the procedure. On the second postoperative day, intradermal test with 1:100 dilution of oxytocin was performed and no reaction was noted. She was advised to undergo patch testing for latex and oxytocin, but she was lost to follow-up.

The potential for cross-reactivity between latex and oxytocin makes it prudent to avoid latex-containing products in women with oxytocin allergy.^[3] Steroid administration can reduce the risk of severe allergic reactions. The use of alternative uterotonics and preparedness for the aggressive management of atony is a cornerstone in the management of such patients. Avoidance of other drugs commonly implicated in anaphylaxis would be beneficial, especially when the exact trigger remains unknown. Thus, in the setting of a probable anaphylactic reaction following oxytocin administration, avoidance of both oxytocin and latex and the appropriate use of alternative uterotonics^[4] with careful monitoring will significantly improve the maternal and foetal outcomes.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Submitted: 18-Jan-2022

Revised: 08-Jul-2022

Accepted: 03-Sep-2022

Published: 20-Sep-2022

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Access this article online	
Quick response code	Website: www.ijaweb.org
	DOI: 10.4103/ija.ija_62_22

How to cite this article: Vijayan V, Gunasekaran A, Mohan VK. Anaesthetic management of a parturient presenting with suspected oxytocin allergy. Indian J Anaesth 2022;66:679-80.

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