

Perioperative Considerations for an Obstetric Patient with Allergies to Lidocaine and Bupivacaine

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- Use in neuraxial procedures: spinal vs. epidural
- Rare reports of local anesthetic reactions in obstetric anesthesiology
- Type(s) of reactions:
 - Maternal and/or fetal hypotension
 - Tachycardia
 - Flushing
 - Anaphylactoid vs anaphylaxis-type sensitivity

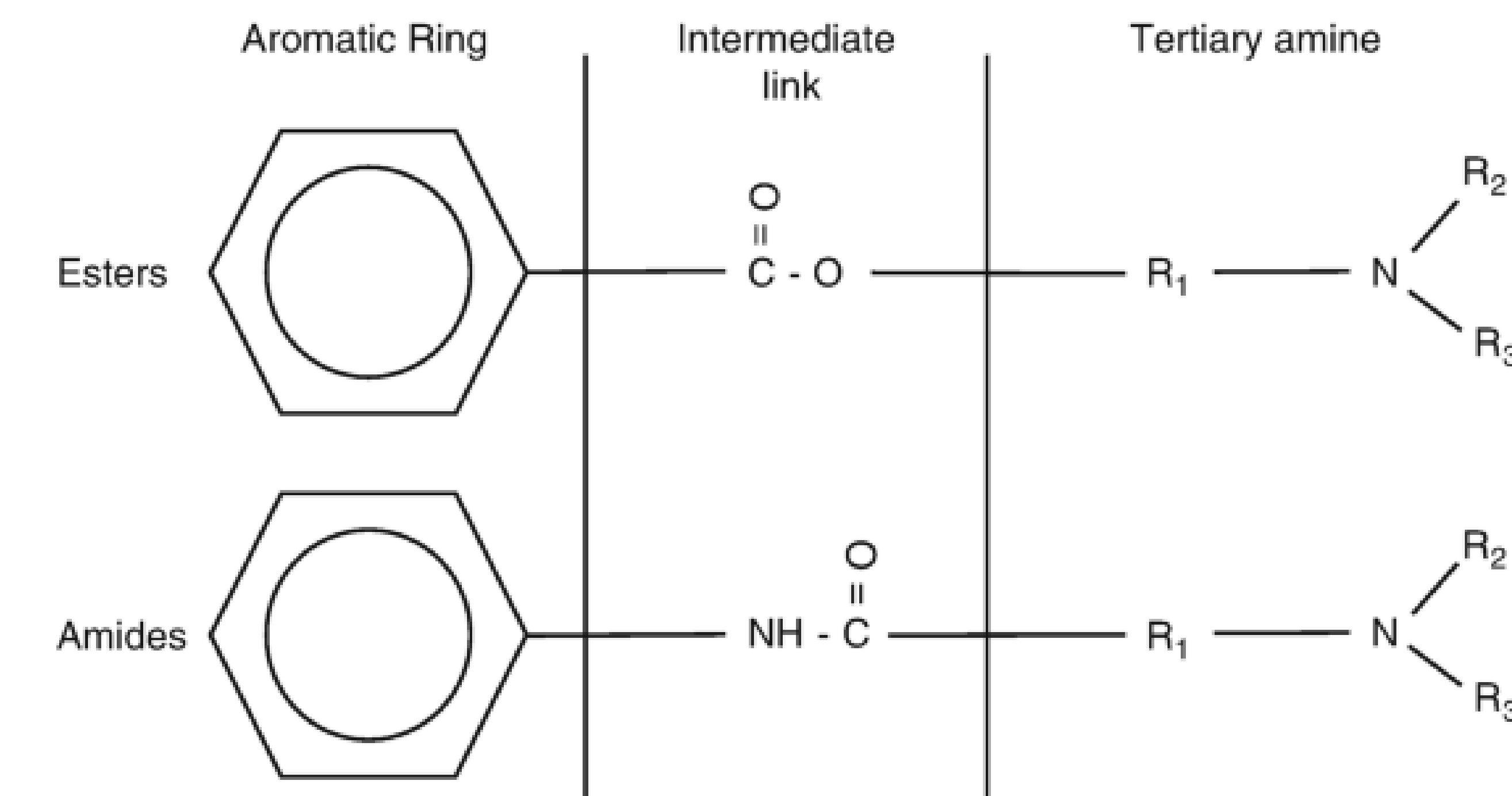
Notable gap in literature describing ester vs. amide local anesthetic allergy & alternatives to local anesthetics in neuraxial solutions

Ester

- Procaine, tetracaine, cocaine, **chlorprocaine**
- Rapid metabolism by plasma esterase
- Allergic reactions often to preservatives (PABA, methylparaben)
- pH 8.5-8.9

Amide

- Lidocaine, ropivacaine, **bupivacaine**
- Slow, hepatic metabolism
- Systemic toxicity more likely
- pH 7.6-8.1



References:

- Acta Obstet Gynecol Scand 1988; 67:184-8
- Anesth Analg 2017; 124(2):383-5
- Anesth Prog 2018; 65:119-23
- Clin Rev Allerg Immunol 2023; 64:193-205
- Int J Obstet Anesth 2013; 22(3):231-42
- Local Anesthetics and Complications of General Anesthesia. 2025; 41-45

Clinical Considerations:



Alternatives to Local Anesthetics

- Limited evidence suggesting neuraxial anesthetic alternatives
- Antihistamines
- Formalized algorithm to navigating medication choice(s)



Importance of Preoperative Evaluations

- Thorough physical exam & history
- Formal allergy testing after adverse reactions



Emotional Impact of Anesthetic Choice

- Importance of communication & shared decision-making
- Intraoperative guidance & expectation-setting