How opioid allergies alter the management of TIVA and peri-operative pain regimen: a case report

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Clinical features:

Patient allergies especially anaphylactic reactions pose a major challenge in the perioperative anesthetic management and pharmacotherapy of the patient. Opioids represent a small percentage of these allergies especially true anaphylactic allergies. Synthetic opioids such as fentanyl represent a rare cause of allergic reaction. The following case involves a patient with a prior true fentanyl anaphylactic allergy and the resulting decision making related to their care. Patient was a 60 year old male who was undergoing lumbar fusion for chronic refractory back pain. Patient had a well-documented true anaphylactic reaction to fentanyl previously. This modified not only the perioperative pain regimen but also our intraoperative pharmacotherapy while he was undergoing neuro-monitoring. We had initially intended to maintain him under TIVA with 0.5 MAC of anesthetic gas in addition to propofol and remifentanil infusions to sustain sufficient anesthesia. Options to manage a patient with an opioid allergy during the perioperative period will be explored as well as options for providing TIVA during neuro-monitoring with opioid allergies.

Conclusion:

Anaphylaxis is a major medical situation caused by an IgE mediated allergic reaction. Commonly caused in the OR by antibiotics, neuro-muscular blockers, latex, and less commonly opioids especially synthetic opiates. Synthetic opiates typically do not have cross over reactions with traditional opiates due to separate classes of chemical makeup. However, lack of extensive research and effective allergy testing should force the provider to err on the side of caution and avoid opiates unless absolutely necessary. Alternatively, a provider with the assistance of allergy immunology service can perform a graded challenge if opiates are necessary to the peri-operative management. TIVA can be conducted without an opiate component and with propofol alone or with an adjunct agent such as dexmedetomidine, ketamine, or etomidate in most situations.