Fentanyl Patch Ingestion in an Infant with Endoscopic Retrieval

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Background

-Fentanyl Patches are often used for prolonged analgesia in patients with chronic pain
-Intentional ingestions have previously been reported
-No prior reports of accidental ingestion in an infant
-No current guidelines exist for whole bowel irrigation (WBI) in patient’s less than 9 months old

Hypothesis

-Given that WBI has been inadequately studied in patients less than 9 months old, endoscopic retrieval may be the preferred management modality in this population to attempt to limit a prolonged ICU course after fentanyl patch ingestion

Case

-8 month old female seen in the Emergency Department after a home respiratory arrest
-Initial interventions included:
  -Intubation for airway protection
  -A trial of naloxone with return of tone and pupillary response
-Exam on arrival showed agonal breathing and pinpoint pupils
-Further history determined her grandmother had been wearing a 75 mcg/hr fentanyl patch on her chest which was now missing
-2 hours after initial naloxone, she again exhibited decreased muscle tone and pinpoint pupils
-Second dose of naloxone given with good response
-Pediatric gastroenterology was consulted for endoscopy
-Endoscopy was performed and showed a foreign body in the mid-esophagus (fig. 1)
-Foreign body was removed and showed a single 75 mcg/hr fentanyl patch (fig. 2)
-After patch removal, patient improved and was able to be extubated later that day

Discussion

-A 75 mcg/hr fentanyl patch contains more than 12.9 mg of fentanyl
-Even patches considered used up can contain more than 50% of their original fentanyl content
-There are no current guidelines for WBI in patients less than 9 months old

Conclusion

-Fentanyl patch ingestion can cause prolonged opioid toxicity
-Endoscopy should be considered for infants when fentanyl patch ingestion is suspected

References