Acute Opiate Withdrawal after Liposuction in a patient on Extended-Release Buprenorphine

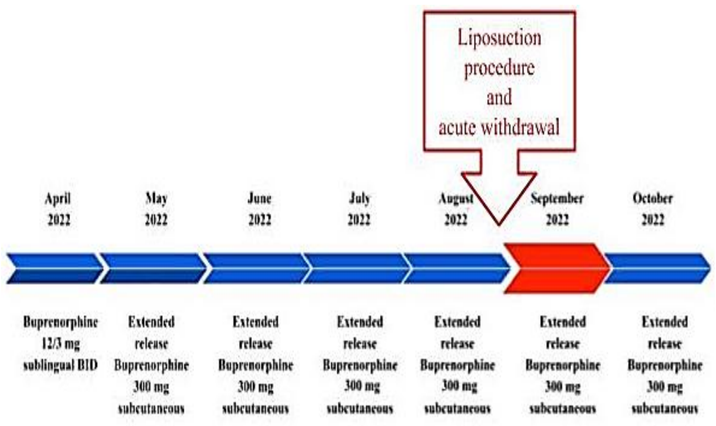
Introduction

- 2001: 19,394 drug overdose deaths in the United States
- 2002: FDA approval, buprenorphine and buprenorphine / naloxone products for the treatment of opioid dependence
- 2016: 63,632 drug overdose deaths in the United States
- 2017: FDA approval, once-monthly, injectable extended release buprenorphine to treat opioid use disorder

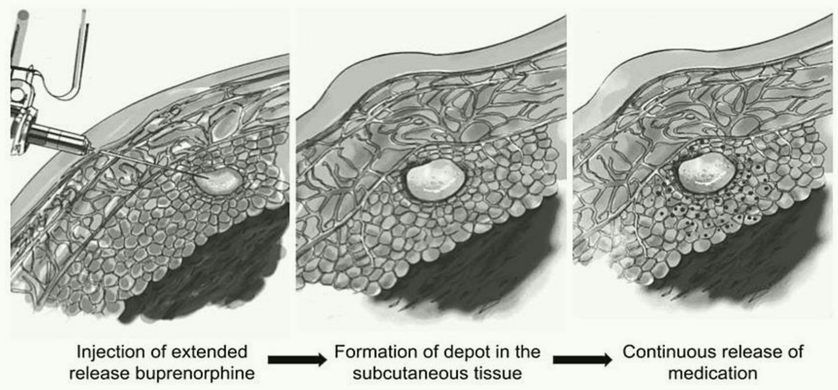
Case description

- 27-year-old female with a history of opiate use disorder
- Treated with MAT, 12/3 mg buprenorphine/naloxone, 2 films sublingual daily
- Transitioned to extended-release buprenorphine injections in April 2022
- Treated with 300 mg of extended-release buprenorphine in April, May, June, July, and August 2022
- Monthly urine toxicology positive only for buprenorphine
- At September appointment the patient reported opioid withdrawal and self medicating with sublingual buprenorphine naloxone films
- Two days after her August buprenorphine injection she underwent abdominal liposuction
- Within 24 hours she developed opioid withdrawal
- Upon examination of the August injection site, the typical buprenorphine depot lump was NOT palpable
- 300 mg of extended-release buprenorphine was injected subcutaneously in the right periumbilical area

Timeline of events

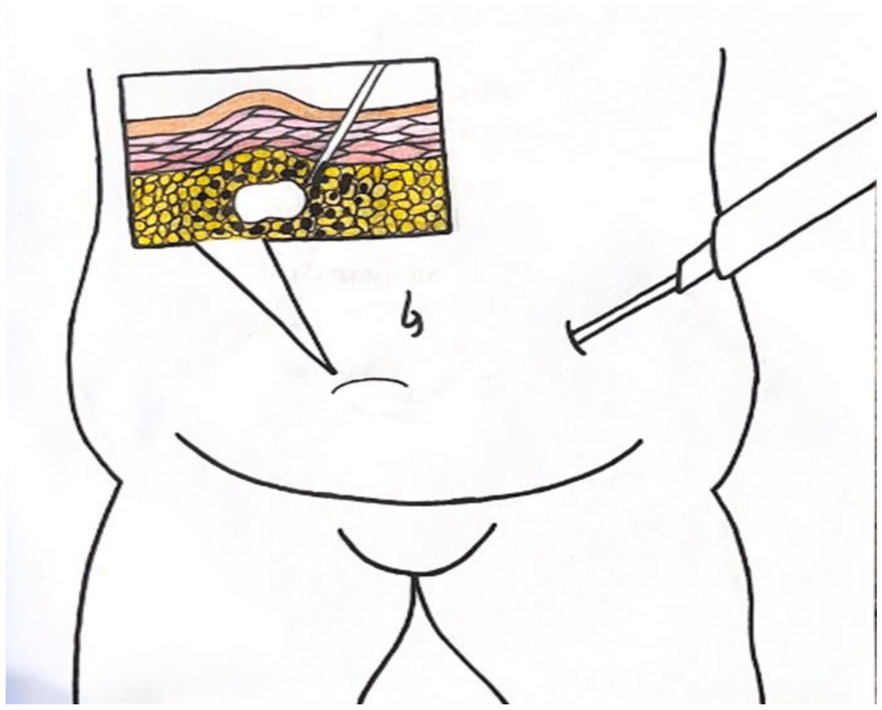


Buprenorphine administration



Buprenorphine is combined with a liquid polymer that solidifies after injection into the subcutaneous tissue. It forms a matrix that releases buprenorphine as the polymer biodegrades

Visual depiction of abdominal liposuction and buprenorphine depot



Discussion

- 2017: FDA approves the first once monthly injectable buprenorphine product for the treatment of opioid use disorder
- Until recently this product was limited to providers with X-waivers
- Most non addiction providers are unaware of this product
- This patient did not disclose all prescribed medications, including buprenorphine
- Providers should promote open discussion of substance use
- This patient did not relapse to heroin or fentanyl
- Preoperative review of the Prescription Drug Monitoring Program will identify buprenorphine prescriptions

Conclusion

- A unique case of opioid withdrawal after a fairly common surgical procedure or “iatrogenic opioid withdrawal”
- Highlights the caution physicians and surgeons must take when patients undergo such surgical procedures.
- A detailed history including drug and alcohol treatment should be obtained prior to all surgical procedures

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