Case of Altered Mental Status Secondary to Hypercalcemia from Granulomatous Reaction to Silicone Injections

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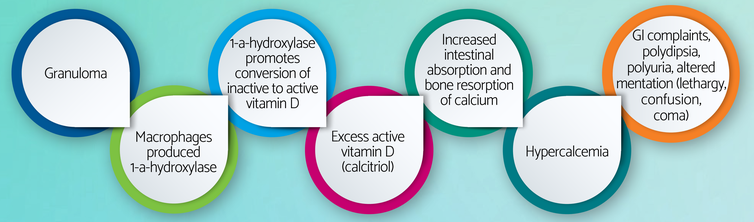
Introduction

Reported cases of hypercalcemia from silicone-induced granulomas have been increasing over the last decade.[2]



- Hypercalcemia from cosmetic surgery is a rare but potentially emerging cause of delirium.
- We present a case of hypoactive delirium from hypercalcemia secondary to granulomatous reaction to silicone injections.

Case Presentation

- Patient was a 39-year-old Hispanic woman with history of gluteal silicone injections 20 years prior.
- She presented with gastrointestinal symptoms, cachexia, anorexia, withdrawn behavior, and dysphoric affect.
- Psychiatry was consulted to evaluate for possible depression and eating disorder.
- On exam, she was dysphoric, lethargic, and confused with waxing and waning alertness.
- She denied any psychiatric history and was reluctant to discuss psychological matters.
- She denied symptoms meeting criteria for MDD, eating disorder, and body dysmorphic disorder.
- EEG revealed encephalopathy.
- Calcium, calcitriol, and PTHrP were elevated, while PTH was low.
- Imaging showed calcifications in gluteal and thigh regions – the sites of her silicone injections.

Lab	Patient's Value	Ref
Calcium	17.2	8.5–10.1
Calcium, ionized	1.89	1.18–1.32
Calcitriol	280	19.9–9.3
PTHrP	8.0	0.0–3.4
PTH	9.6	18.5–88.0

- She was diagnosed with hypoactive delirium secondary to hypercalcemia from silicone-induced granulomas.
- Aripiprazole was initiated to improve mentation, mood, and energy to good effect.
- However, she became noncompliant as she denied needing psychotropic medications.
- Her calcium levels remained high (12.6, ionized 1.59), and her cachexia worsened over time.
- Although medically unstable with persisting delirium, she was brought home by family against medical advice.

Discussion

- Silicone-induced granulomas is an unusual but rising cause of hypercalcemia.
- Unfortunately, treatment is often difficult and noncurative.
  - Mainstay treatment with fluids and steroids temporarily improves hypercalcemia.[2]
  - Excising the granulomas often fails as granulomas migrate.[4]
- Both medical and surgical treatments were unsuccessful for our patient.
- Studies show that neuropsychiatric disturbances may persist even when hypercalcemia resolves,[3] but aripiprazole may improve hypoactive delirium[1] as briefly seen in our patient.

Conclusion

- Cases of granulomatous reactions to silicone injections are rare but increasing.
- Therefore, all CL psychiatrists should consider hypercalcemia from granulomatous reactions in patients with prior cosmetic surgeries presenting with altered mentation.
- Although delirium can persist after correcting hypercalcemia, aripiprazole may be used supportively for hypoactive delirium.

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