

Excessive Hormone Therapy in a Male Transitioning to a Female Causing Cirrhosis

Herman Suga DO¹, David Truscello DO¹, Kirti Dasu, BA², Richard Walters DO³, Lucy Joo DO³

1. Gastroenterology, Jefferson New Jersey
2. Drexel Graduate School of Biomedical Sciences
3. Gastroenterology, Jefferson University Hospital

Introduction

- High doses of progestins/estrogens can cause elevated liver enzymes, serum aminotransferase elevations with no changes in alkaline phosphatase or bilirubin, 1 to 2 weeks after treatment.
- Side Effects are transient and resolve without dose modification or discontinuation
- We present a unique case where a male in-transition to female was found to be cirrhotic from hormonal dose therapy

Case Presentation

- 61 year old male with history of HLD, HTN, DM, gender dysmorphia who was Admitted for abdominal pain
- LFTS were unremarkable prior to the visit
- Did not follow up with his fatty liver disease history
- Began hormonal therapy to transition to a female
- Medication: estrogen patch with a transition to estradiol 2mg daily
- Patient denied any other medication changes, no prior alcohol use, no other risk factors for cirrhosis
- LFTS on arrival: T. Bili of 6.3, D. Bili of 3.2, ALK phos of 263, AST of 51, ALT of 176, lipase of 100
- Ultrasound and MRCP- cirrhosis with portal hypertension and cholelithiasis
- Upon discontinuation of hormonal therapy his LFTS returned to baseline in 5 days

Gender-affirming hormonal therapies in the transgender population can lead to long term sequelae such as developing cirrhosis.

Discussion

- Gastroenterologists should be aware of gender-affirming hormonal therapies in the transgender population as they can lead to long term sequelae such as developing cirrhosis.
- **Evidence in the literature is sparse with no consensus on the long term effects of high dose hormone therapy.**
- Further studies should focus on the risk factors of starting hormonal therapy using demographic characteristics, BMI, and alcohol use as further parameters for gauging cirrhosis.
- We present the case of a 63-old trans-female patient whose hormone therapy can be associated directly with liver cirrhosis.

References

1. A Stangl T, M Wiepjes C, Defreyne J, Conemans E, D Fisher A, Schreiner T, T'Sjoen G, den Heijer M. Is there a need for liver enzyme monitoring in people using gender-affirming hormone therapy? *Eur J Endocrinol.* 2021 Apr;184(4):513-520. doi: 10.1530/EJE-20-1064. PMID: 33524005.
2. Wiepjes CM, Nota NM, de Blok CJM, Klaver M, de Vries ALC, Wensing-Kruger SA, de Jongh RT, Bouman MB, Steensma TD & Cohen-Kettenis P et al. The Amsterdam cohort of gender dysphoria study (1972–2015): trends in prevalence, treatment, and regrets. *Journal of Sexual Medicine* 2018 15 582–5 90.
3. Wierckx K, VanCaenegem E, Schreiner T, Haraldsen I, Fisher AD, Toye K, Kaufman JM & T'Sjoen G Cross-sex hormone therapy in trans persons is safe and effective at short-time follow-up: results from the European network for the investigation of gender incongruence. *Journal of Sexual Medicine* 2014 11 1999–2011