Duct ectasia, a rare complication of gynaecomastia

NA. Fuentes-Bolanos; MD. Martin Salvago; G. Martinez Moya; M. del Toro Codes and J. Del Cuz Moreno
Complejo Hospitalario de Jaen, Jaen, Spain
Non-disclosure statement

Introduction
Mammary duct ectasia is a benign breast condition which affects primarily middle-aged to elderly women. However, it can occur wherever there is breast ductal epithelium.

Case report

9yr old boy referred due to: gynecomastia

Past medical history:
- Pubic hair development started at the age of 8.
- His mother noticed bilateral breast enlargement at the age of 6. No discharge from the nipples.

Family history: unremarkable

Examined: growth parameters adequate by age (height 0.5, weight 1.1SD).
- Tanner stage 1
- Bilateral gynaecomastia with no signs of inflammation.
- Genitalia: normal male configuration.
Rest of the general examination was unremarkable.

Investigations

Initial investigations
- Liver, kidney and thyroid function test: normal range.
- Testosterone 0.16ng/ml [1.8-8], oestradiol 9 pg/ml [<25], prolactin 8.7 ng/ml [3-27], LH 0.06 UI/L[<0.3] and FSH 0.9 UI/L[<3] and human chorionic gonadotropin (hCG) <1.2mUI/ml [0-5].
- Karyotype 46XY.

Mammography: compatible with gynaecomastia

Scrotum ultrasound scan: no pathological features

Initial diagnosis: idiopathic gynaecomastia.

Follow up: complain about breast pain and redness.
On the examination: left mobile, tender and fluctuate on palpation mass under the nipple and redness, no discharge.

Second mammography: complicated breast cyst (8.8 x por 43.6 x 42.7mm)

Surgical resection

Anatomo-pathological features: left duct ectasia (estrogen receptors: positive 10%)

Secondary diagnosis: duct ectasia in a boy with gynecomastia self-limiting

Conclusion
We described one of the few cases reported of duct ectasia in a 9 years old male. It is well known that in the vast majority, gynaecomastia is self-limiting, however it is necessary to be aware of its possible complications in order to avoid mistakes and familial stressed as mammary duct ectasia can mimic invasive carcinoma clinically.