A RARE CASE OF THIAZIDE-INDUCED BENIGN GYNAECOMASTIA
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ABSTRACT

BACKGROUND
Gynaecomastia is a common disorder of the endocrine system in which there is a noncancerous enlargement of the male breast. The incidence of drug-induced gynaecomastia is about 4-10%. One among them are the thiazide group of diuretics, which result in gynaecomastia by inhibition of androgen synthesis. The present case study is about a 75-year-old patient who is a known case of diabetes and hypertension with primary complaints of bilateral breast enlargement diagnosed with a rare presentation of hydrochlorothiazide adverse drug reaction gynaecomastia.¹

KEYWORDS
Thiazide, Benign, Gynaecomastia.


BACKGROUND
Gynaecomastia is a common disorder of the endocrine system in which there is a noncancerous enlargement of the male breast. It results from conditions that cause imbalance of oestrogenic and androgenic effects on the breast resulting in an increased or unopposed action on breast tissue.² Approximately, 4-10% cases of it are due to drug induced. Mechanism is by inhibition of androgen synthesis. It is the consequence of administration of thiazides. Thiazide is a class of diuretics derived from benzothiazide.³ They are in management of hypertension and heart failure. The incidence of gynaecomastia with thiazides is 5-10%, which is one of rare presentations of patients.⁴

MATERIALS AND METHODS
A case study of 75-year-old male patient came with chief complaint of enlargement of both breasts and is a known hypertensive and diabetic since 5 years and on regular medication of olmesartan H and Glycomet Trio.

On clinical examination, there is bilateral breast enlargement, which is firm in consistency and tender.

Investigations done-
- Routine investigations are within normal limits.
- High-resolution sonography of both breasts.

Figure 1. Shows Benign Enlargement in the Form of Fibrous Tissue in Subareolar Region

Cytopathology Report-
Revealing benign breast lesion with epithelion.

Figure 2. Benign Breast Lesion
DISCUSSION
The above case illustrates that gynaecomastia is a rare complication of thiazide usage. Patients usually consults physician due to pain in breasts and for cosmetic reasons.

Classification
The spectrum of gynaecomastia severity has been categorised into a grading system:
1. Grade I- Minor enlargement, no skin excess.
2. Grade II- Moderate enlargement, no skin excess.
3. Grade III- Moderate enlargement, skin excess.
4. Grade IV- Marked enlargement, skin excess.

Chart 1. Approach to Gynaecomastia
TREATMENT

Medication
Most effective when done within the first two years after the start of male breast enlargement. Selective Oestrogen Receptor Modulators (SERMs) such as tamoxifen or raloxifene may be beneficial in the treatment of gynaecomastia, but are not approved by the Food and Drug Administration for use in gynaecomastia. Tamoxifen may be used for painful gynaecomastia in adults. Aromatase Inhibitors (AIs) have been used off-label for cases of gynaecomastia occurring during puberty. A few cases of gynaecomastia caused by the rare disorders aromatase excess syndrome and Peutz-Jeghers syndrome have responded to treatment with AIs such as anastrozole.

Surgery

Male with asymmetrical gynaecomastia before and after excision of the gland and liposuction of the waist.

If chronic gynaecomastia is treated, surgical removal of glandular breast tissue is usually required. Surgical approaches to the treatment of gynaecomastia include subcutaneous mastectomy, liposuction-assisted mastectomy, laser-assisted liposuction and laser-lipolysis without liposuction. Complications of mastectomy may include haematoma, surgical wound infection, breast asymmetry, changes in sensation in the breast, necrosis of the areola or nipple, seroma, noticeable or painful scars and contour deformities.

Radiation therapy and tamoxifen have been shown to help prevent gynaecomastia and breast pain from developing in prostate cancer patients who will be receiving androgen deprivation therapy. The efficacy of these treatments is limited once gynaecomastia has occurred and are therefore most effective when used prophylactically.

CONCLUSION
Usage of antihypertensive has been increasing nowadays due to increased patient awareness and early diagnosis of hypertension. For control of hypertension, diuretics are prescribed frequently, so it is important to recognise drug-induced gynaecomastia as early as possible. In the above case, the patient is diagnosed to have gynaecomastia early when he developed pain and tenderness in breast before developing enlargement of breast. In such conditions, patient can be given medical prophylaxis and to consider change of the antihypertensive medications, so that we can save patient from unnecessary cosmetic surgery and its related complications.

REFERENCES