Granulomatous mastitis as a consequence of idiopathic hyperprolactinemia

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INTRODUCTION

- Granulomatous mastitis (GM) is a benign inflammatory breast condition that is usually associated with prior pregnancy and lactation.
- Bacterial cause = Corynebacterium kroppenstedtii
- Rarely it presents due to elevated prolactin levels
  - Dopamine antagonists or pituitary adenomas
- Initial presentation mimics carcinoma of the breast
- Biopsy: noncaseating granulomas, multinucleated giant cells, epithelioid histiocytes, and chronic inflammation.

CASE PRESENTATION

- 34-year-old nulliparous female presented to the hospital with a painful left breast lump.
- An ultrasound and fine-needle aspiration biopsy of the mass diagnosed granulomatous mastitis.
- A pregnancy test at the time was negative.
- Increasing pain and worsening skin changes since discharge prompted her visit to the endocrine office.
- Physical exam of the breast: nodular appearance to the breast, indurated nipple with serosanguineous discharge and erythematous peeling skin

FURTHER INVESTIGATION

- Prolactin level and TSH were found to be 79.3 ng/mL (elevated) and 4.200 uU/mL respectively (normal).
- No family history of elevated prolactin levels or thyroid disease.
- Not using any drugs or medications that could explain the high prolactin.
- A pituitary MRI was within normal limits.

MANAGEMENT

- Cabergoline therapy was started which resulted in resolution of the mastitis and breast discharge, and prolactin levels normalized.
- She reported breast discharge three to five years prior to current presentation.
- Evaluation at that time reportedly showed high prolactin levels, and a breast ultrasound and pituitary MRI were negative.
- She took cabergoline therapy then for 2 months and then stopped and did not follow through.
- Breast discharge had stopped for 6 months but recurred intermittently for 2 years prior to present.

REFERENCES


DISCUSSION

- Etiology- most closely related to pregnancy, lactation, and oral contraceptive use.
- In the absence of these risk factors- evaluate serum prolactin levels, and if elevated, investigate the etiology.
- Prolactin: pro-inflammatory hormone that promotes widening and thickening of ductal tissue and milk stagnation leading to a blockage.
- As with our patient, GM as a result of hyperprolactinemia has been shown to resolve with treatment with dopamine agonists, primarily cabergoline.

CONCLUSION

- Granulomatous mastitis presents similarly to carcinoma of the breast and biopsy is needed for diagnosis.
- In the absence of common etiologies, prolactin levels should always be investigated.