

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

FUTHER INVESTIGATION

- ❖ Prolactin level and TSH were found to be 79.3 ng/mL (elevated) and 4.200 uIU/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.

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.

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