

## **Imaging appearances of male breast cancer: a pictorial essay**

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**BACKGROUND:** Breast cancer in men accounts for 0.17% of all cancers in men and less than 1% of all breast cancers, and the most common histologic type is infiltrating ductal carcinoma, accounting for 85% of cases.

**HYPOTHESIS:** Risk factors for male breast cancer include advanced age (50-70 years old), family history of breast cancer, Klinefelter's syndrome, germline mutations of BRCA1 and BRCA2, conditions that result in increased estrogen levels, and radiation therapy to the chest. The most common presenting symptom of breast cancer in men is a unilateral painless mass. Other clinical findings are nipple retraction, nipple discharge, skin thickening, and lymph node involvement.

**METHODS:** In this pictorial essay, the authors present cases with imaging appearances of male breast cancer.

**RESULTS:** Breast cancer in men presents most frequently on mammography as a high-density mass with a spiculated or indistinct margin in a subareolar and eccentric location. On sonography, breast cancer in men has a similar appearance to that carcinomas of the same cell type seen in women. Mammography has been used as the imaging modality of choice in the evaluation of the male breast. Sonography has been found useful for evaluation of an underlying mass and to directing percutaneous biopsies. Magnetic resonance imaging (MRI) has played an increasingly important role.