‘ORPHAN’ED IN THE BREAST
A Case of Occult Metastasis from Papillary thyroid Carcinoma

Abstract
- Papillary thyroid carcinoma (PTC) is usually indolent with good prognosis and long term survival. However, PTC distant metastasis is often a grave event and accounts for most of its disease-specific mortality.
- Major sites of distant metastasis are lung and bone. Metastases to breast, brain, liver, kidney, muscle, and skin are rare.
- We report here a rare case of PTC which had an occult metastasis to breast picked up with radioiodine scan and confirmed with subsequent investigations.

Case
- 47 yr old lady
- Treated in Feb 2014 for papillary carcinoma thyroid with surgery and radio-iodine ablation.
- Post I-131 therapy whole body scintigraphy was done which showed significant I-131 uptake in residual thyroid tissue and focal abnormal increase I-131 tracer uptake in right lower chest.
- Mammogram was done
- Mammogram and USG detected an ill defined lesion less than 1cm in right breast.
- No co-morbidities

PERSONAL HISTORY:
- Pre-menopausal, multiparous with 2 FTCs, breast fed for 3 yrs.
- O/E:
  - Right breast shows some nodularity in lower outer quadrant around 7o clock position, about 1 finger breath away from areolar margin.
  - no other lumps felt.
  - no axillary lymph nodes.
  - Opp breast, axilla: NAD; no s/l nodes.

Glandular pattern

Nucleus is round with few of them showing nuclear inclusions

Cores of breast tissue with a neoplasm composed of cells in cribriform pattern and occasional glands

Final Diagnosis
- INVASIVE CARCINOMA OF BREAST;
- CORRELATING WITH THE FINDINGS, METASTASIS FROM PRIMARY PAPILLARY THYROID CARCINOMA IN A KNOWN CASE.

Papillary carcinoma of thyroid (Previous Thyroidectomy)

Gross - WLE Breast

Discussion
- Papillary and follicular carcinomas of the thyroid are often together referred to as differentiated thyroid carcinoma (DTC).
- Papillary carcinoma, which ordinarily behaves in an indolent manner, can have unusual metastatic presentations.
- Metastasis to the breast from DTC is extremely rare.

References
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Follow up
- Patient orally ablated with 251MBq of I-131
- To be followed up after 6 months with wholebody I-131 scan and serum thyroglobulin, TgAb estimation after 6 months
- Being single metastasis in breast, curative wide local excision was done