Breast Carcinoma, Multifocality and Multicentricity

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Back to School !!!
Lobes

Galactophores (Ducts)

Lactiferous Sinus

Nipple
Histology: the epithelial tissue of the breast
DEFINITIONS

**Multicentricity** is defined by presence of carcinoma in a breast quadrant other than the one containing the dominant mass.

The extension of a single carcinomatous focus within ducts and lobules limited to one region or quadrant is commonly referred to as **multifocality**.
Multifocal Carcinoma

Multicentric Carcinoma
Multicentricity was detected by Fisher et al. (1975) in 121 (13.4%) of 904 cases of invasive carcinomas; one third of the smaller foci were invasive and the rest were in situ.

Observations:

• Carcinoma in situ:
  – Lobular (Lobular neoplasia, grade III)
  – Ductal

• Carcinoma Invasive:
  – Lobular
  – Ductal
Lobular carcinoma in situ (Lobular neoplasia Grade III)
Extension of ductal carcinoma in situ (Lobular cancerisation)
Carcinoma Multifocal
Carcinoma multicentric
Clonal analysis studies suggest that the multicentric tumors do not arise independently but rather that a single primary carcinoma spreads throughout the breast.

**Facts:**

- Multicentricity is more common in lobular than in ductal carcinomas.
- A higher incidence of multicentricity was reported in studies in which whole organ preparations were examined by radiography and light microscopy.*
- In DCIS, multifocality varies from 40 to 60%, and multicentricity from 15 to 37%, depending on different studies and criteria of definitions.

A case of multifocality and multicentricity
Mise d’un harpon sous contrôle échographique et vérification mammographique
Radiographie de la pièce opératoire
• Multifocal/multicentric cases had higher frequencies of lymph node involvement than unifocal lesions of similar size category.
• …if aggregate diameters are used, unifocal and multifocal breast carcinomas are similar with respect to frequency of regional lymph node metastasis.

Pathologic analysis of tumor size and lymph node status in multifocal/multicentric breast carcinoma.
Cancer 2002 Mar 1;94(5):1383-90
End of Presentation

Thank you for your Attention