Lipid Rich Carcinoma Breast in a Male – A Rare Presentation

Introduction:
Lipid-rich carcinoma is a very rare histological variant of breast cancer that accounts for less than 1% of all breast cancers [1]. It is composed of clear to vacuolated cytoplasm with abundant neutral lipid present within 90% of the tumor cells [2]. Lipid-rich carcinomas are considered to behave aggressively and have a worse prognosis than other types of breast cancer. However, the true behavior of this tumor is not well known. Gene expression profiling studies have refined breast cancer classification and identified distinct subgroups that have an independent association with patient outcome [3, 4], and findings can be surrogate by immunohistochemical markers that match the gene expression patterns [5, 6, 7]. Here, a case of lipid-rich carcinoma previously included as case 1 in a series of 13 breast cancer patients who received long-term treatment with neuroleptics [8] was re-evaluated to determine the intrinsic immunohistochemical (IHC) subtype. The present report describes the histological characteristics and intrinsic subtype profile of this case of lipid-rich carcinoma of the breast.

Case Report:
A 65 years male patient presented with lump in the left breast since 2months. On examination A solitary swelling of size 6x4 cm present in the peri-aerolar of the left breast. Firm in consistency attached to the underlying fascia Skin ulceration +, Tenderness + Axillary Lymph Nodes : Level 1, Level 2 ++. Patient underwent MRM.

Investigations and Post-op:
- FNAC : Intraductal Carcinoma
- GROSS : 6x4cm ulcerative growth involving the underlying fascia
- HPE : Breast tumor with foamy cells
- PAS negative
- ER and PR – negative
- Her 2 neu - positive

Gross picture of the specimen.
Microscopy

Vacuolated & Foamy Cytoplasm
PAS-negative
ER-negative
HER2/Neu-Diffusely Positive (3+)

Discussion:
The prognosis for men with lipid rich breast cancer tends to be poor. This is mostly due to the fact that in up to 70% of cases, nodal metastasis has already occurred at the time of clinical presentation. However, there is really no evidence that lipid rich breast cancer is worse than any other kind of breast cancer. Prognostic indicators are: tumor stage, grade, and hormone receptor status. Approximately 80% of women will develop lymph node metastasis after two years. The mortality rate for men with lipid rich breast carcinoma is quite high, at almost 40% during the first year after diagnosis.

Summary:
The definition of lipid-rich carcinoma is still not exactly established, because it is not clear, how many cells are supposed to be lipid containing to confirm the diagnosis. Age: 33-81 years. Distinct histological picture. Invasive foci possess neoplastic cells-large and polygonal, with abundant vacuolated or foamy cytoplasm.

REFERENCE