

Inflammatory Carcinoma of Breast

Inflammatory breast carcinoma/cancer (IBC) is an invasive malignancy of breast tissue. It characteristically invades dermal lymphatic vessels, which can be seen on histology. On physical examination of the breast, this disease may mimic mastitis or Paget disease of breast. Key clinical findings include peau d'orange, breast tenderness, and bloody nipple discharge. Unfortunately, inflammatory breast carcinoma has a poor prognosis.



PLAY PICMONIC

Characteristics

Invasive Malignancy

Invasive Malignant-man

Inflammatory carcinoma of the breast is considered a rare, aggressive, advanced form of breast cancer that is characterized by dermal lymphatic invasion of tumor cells.

Invades Dermal Lymphatic Vessels

Invading Deer-mouse Lymph-limes and Vessels

Histologically, inflammatory carcinoma involves extensive blockage of the lymphovascular dermis with carcinoma cells. In other words, the tumor cells invade the dermal lymphatics.

Mimics Mastitis and Paget Disease of Breast

Mime Mast on Fire and Pageant-sash

Inflammatory carcinoma can often be confused with other similar conditions e.g. mastitis and Paget disease of the breast. Inflammatory invasive carcinoma is not necessarily an inflammatory condition as inflammation is not present. Instead, the underlying pathophysiology involves diffuse infiltrates of the dermis.

Clinical Features

Peau d'Orange

Peeled Orange

The presence of a tumor leads to impaired lymphatic drainage and subsequent lymphedema. This leads to tightening of the skin which leaves the skin of the breast resembling an orange peel. The impaired lymphatic drainage can also cause hair follicle pitting and erythema.

Breast Tenderness

Breast Tenderizer

Breast tenderness is associated with inflammatory carcinoma. This can be useful in terms of diagnosis as most breast cancers, if palpable, will be non-tender.

Bloody Nipple Discharge

Bloody Discharge from Nipple

Inflammatory carcinoma of the breast can also present with bloody nipple discharge.

Considerations

Poor Prognosis

Gravestones

Inflammatory carcinoma is associated with a poor prognosis due to the time of presentation relating to likely metastases. Thus, there is a 50% survival rate at 5 years from diagnosis.