

Answers to Medical Quiz

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A1. The differential diagnosis includes:

- Acute Mastitis.
- Inflammatory breast cancer.

A2. The investigations needed were:

1. Mammography and Ultrasonography. Both showed increased skin thickness of right breast but there was no breast calcifications or masses.
2. US guided Fine needle aspiration cytology of the axillary and supraclavicular lymphadenopathy. The result was metastatic invasive ductal carcinoma.

A3. The MRI showed right breast increased vascularity especially in the skin and in the glandular tissue as compared to the left. here was no definitive mass lesion noted within the breast. The description is consistent with inflammatory breast cancer.

A4. The optimal treatment is considered to be induction chemotherapy, mastectomy, and comprehensive chest wall nodal irradiation followed by maintenance chemotherapy.

DISCUSSION

Inflammatory breast cancer is the most lethal and fulminant of all breast cancers. It is characterized by rapid growth and short doubling time resulting in local growth similar to a "brush fire" extending rapidly in all directions across all surfaces and tissue planes¹.

It is also characterized by rapid systemic dissemination resulting in the death of the majority since the diagnosis tends to be delayed, clinically it can be confused with acute mastitis

The conventional imaging modalities including mammography and ultrasonography are of limited value because of non-specific findings. Magnetic resonance imaging is non-invasive and showed high sensitivity and characteristic features in inflammatory breast cancer^{2,3}.

It is not recommended to use Tc-99m sestamibi scintimammography for detecting inflammatory breast cancer⁴.

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Traditional treatment consisted of surgery or radiation therapy alone with cure rates rarely achieving 15%, combination chemotherapy along with local irradiation of the breast and regional lymphatic, has increased the five years survival rate to 35 to 50%¹.

The optimal treatment is considered to be induction chemotherapy, mastectomy, and comprehensive chest wall/Nodal irradiation followed by maintenance chemotherapy¹.

Some centers are investigating accelerated radiation therapy fractionation schemes that may further improve local control but the prognosis of this disease is very poor¹.

REFERENCES

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