

Case Note

Pregnancy Associated Breast Cancer — The Obstetrician's Role

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Breast cancer is the most common cancer in many geographic areas, the most frequent cause of cancer deaths in women, and is also the cancer most likely to be seen during pregnancy and lactation. Delay in diagnosis appears to be the primary reason for the generally worse prognosis overall for all patients with breast cancer diagnosed during pregnancy and lactation. In this context, the patient's family physician or obstetrician who performs the routine antenatal examinations can play an important role by performing a vital breast examination which might bring to light and prompt timely investigation of otherwise asymptomatic breast masses.

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Key words : Pregnancy, breast cancer.

Pregnancy associated breast cancer is defined as the breast cancer diagnosed during pregnancy or within the first year after delivery. The disease is estimated to have an incidence of 0.2% to 3.8% and is reported to occur in 1 in 10,000 to 1 in 3,000 pregnancies¹. A case report has been presented here to highlight the role of the family physician/obstetrician in the early detection of the disease, thus improving survival.

CASE REPORT

A 30 years old primigravida was referred to the hospital with a lump in her left breast and nine months of amenorrhoea. She had been married for 2 years, conceived spontaneously and had been having regular antenatal check-up. At twenty-five weeks of gestation, the patient had noticed a mass in her left breast, which was associated with milky discharge from the nipple. For these symptoms, she had visited her doctor who apparently dismissed it as a pregnancy related breast change and put her on tablet pyridoxine to suppress lactation. She had no family history of breast cancer.

Examination — General examination revealed marked pallor. Her vitals were stable. She had a 10x11 cm lump in her left breast which occupied all the quadrants.

Observations — The lump had an irregular surface and was of variable consistency. The right breast was normal. She had multiple, enlarged, hard and mobile lymph nodes in the left axilla. The uterine height was corresponding to 32 weeks of gestation with a cephalic presentation.

Investigations — FNAC of the breast lump revealed papillary carcinoma and FNAC of the left axillary lymph nodes

revealed malignant cells. An ultrasound scan of the abdomen showed liver metastasis. A clinical diagnosis of carcinoma of the left breast, stage T₄ N₁ M₁, in a primigravida at 36 weeks of gestation was made.

Management — As the patient's disease dictated the need for urgent and aggressive chemo-radiation, labour was induced, following which the patient delivered a live male baby weighing 2.1 kg. On the third post natal day, the patient developed an ulcer of 2x2 cm over the upper, outer quadrant of left breast associated with a bloody discharge. The planned mode of management was four courses of chemotherapy followed by surgery, chemotherapy and radiotherapy. By the end of the third course of chemotherapy, patient had developed a large (20 x 15 cm) fungating tumour with ulceration, over the upper and outer quadrant of left breast with a purulent discharge (Fig 1). Patient underwent toilet mastectomy followed by skin grafting 1 week after mastectomy. On the 12th postoperative day,

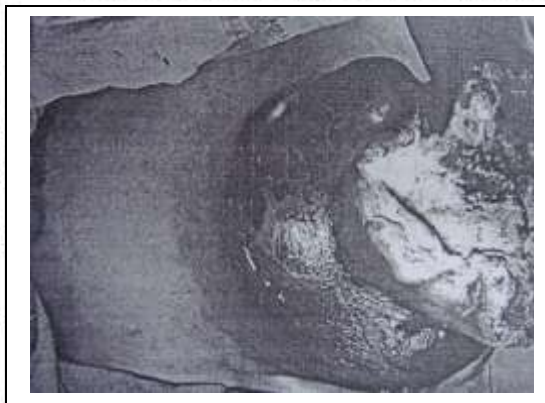


Fig 1 — Depicting Large Fungating Tumour Over the Upper and Outer Quadrant of Left Breast

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patient developed paraplegia for which MRI of the spine was done. MRI showed destruction of D6 and D8 vertebral bodies suggestive of secondaries in the spine (Fig 2). Palliative external radiotherapy to the spine was started.

Follow-up — One month following mastectomy, patient developed hard nodules over the skull which again were suggestive of metastasis. A Bone scan done confirmed the presence of disseminated skeletal metastases. At this stage the patient's relatives wanted to take her home against medical advice and the patient succumbed to the disease at home a week later. The exact cause of death remained unknown as the death occurred at patient's residence.

DISCUSSION

With the current trend toward postponing childbearing to the mid to late 30's, it is expected that the incidence of breast cancer diagnosed during pregnancy and lactation will increase.

The occurrence of breast cancer during pregnancy and lactation presents a challenging clinical problem, which is compounded by its infrequent occurrence and by the emotional issues involved. Delay in diagnosis appears to be the primary reason for the generally worse prognosis overall for all patients with breast cancer diagnosed during pregnancy or lactation^{1,2}. Unfortunately, this delay can be attributed to physician neglect as readily as to the patient. Both general practitioners and obstetrician-gynecologists, can play a pivotal role in the diagnosis of breast cancer during pregnancy and lactation. It is especially important that a careful breast examination should be performed at the initial obstetric visit before the breasts become engorged and difficult to examine later. There is no evidence to implicate pregnancy or lactation in either the aetiology or the progression of breast cancer¹. There should be nothing special about the diagnostic evaluation of pregnant or lactating patients with breast masses; with the exception, that xeroradiography tends not to be as helpful because of the parenchymal changes associated with gestation³. Increased water density of the breast reduces the discriminatory capacity of mammography⁴. Any dominant mass



Fig 2 — MRI of the Spine Showing Destruction of D6 & D8 Vertebral Bodies — Secondaries

should be evaluated promptly during pregnancy or lactation^{1,5}. Therapeutic options vary, depending on the stage of disease and the stage of pregnancy. Operable disease, stage I and II modified radical mastectomy is the treatment of choice in the pregnant patient. A second choice would be total tumour excision and axillary dissection to be followed by whole-breast irradiation after delivery. In patients with positive axillary lymph nodes, chemotherapy should certainly be delayed until after delivery. General anaesthesia is safe if the usual precautions are taken to compensate for the physiologic changes induced by pregnancy⁶. In patients with locally advanced or metastatic carcinoma, stage III and stage IV diagnosed early in pregnancy, for whom both chemotherapy and radiation therapy would be recommended, serious consideration must be given to termination of pregnancy. In the later stages of pregnancy, non-surgical therapy could be delayed until after delivery, but one must weigh the risk of observing an advanced breast cancer for a long period^{1,7,8}. Prognosis in these patients, stage for stage is similar to that in a non-pregnant patient^{2,8}.

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