UNILATERAL BREAST ENLARGEMENT AS AN UNUSUAL MANIFESTATION OF CARDIAC FAILURE: A CASE REPORT

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SYNOPSIS

A case of unilaternal breast enlargement as a rare manifestation of cardiac failure is presented.

Key Words: unilateral breast enlargement, cardiac failure

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INTRODUCTION

Besides dependent oedema, accumulation of fluids in serous cavities (ascites, pleural effusion, pericardial effusion) is a well established feature of congestive cardiac failure. Pitting oedema of arms and face occurs rarely and only late in the course of heart failure (1, 2).

To the best knowledge of the author unilateral breast enlargement is not a manifestation of congestive cardiac failure in any standard textbook.

CASE REPORT

A 40 year old Malay female was first told to have heart disease at the age of 39 years while expecting her last child. She was asymptomatic and the heart lesion was discovered during routine antenatal screening. Prior to that she went through five uneventful pregnancies, all the five being domiciliary deliveries, conducted by the Village Midwife.

She was admitted with congestive cardiac failure at eight months of gestation and was successfully treated. She delivered a normal baby a month later. She defaulted follow up since then. Four months after her delivery she was readmitted with congestive cardiac failure. She admitted having progressive exertional dyspnoea, orthopnoea, paroxysmal nocturnal dyspnoea and cough productive of whitish sputum ever since her delivery. She breast-fed her baby with difficulty and had difficulty in doing her household chores. Examination at that time revealed cardiomegaly with features of mixed mitral valve disease. She responded to standard management of congestive cardiac failure and was discharged after a week's stay. Three weeks later she was readmitted with the same problem and responded satisfactorily to treatment.

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She was on regular follow-up since then but five months later she presented with one week history of progressive exertional dyspnoea, swelling of both legs, right arm and right breast. There was cough productive of pinkish sputum, anorexia and weight loss. She also complained of itchy rash over the right forearm with a painful swelling in the right axilla.

There was no known past history of rheumatic fever, heart disease, hypertension or other significant medical illness.

On examination she had signs of severe congestive cardiac failure. She was short of breath even at rest. There was pitting oedema of both legs, thighs, sacrum, and whole of the right arm. The right breast nipple had a peau d'orange appearance with pitting oedema (fig. 1). There

LEGENDS FOR ILLUSTRATIONS.

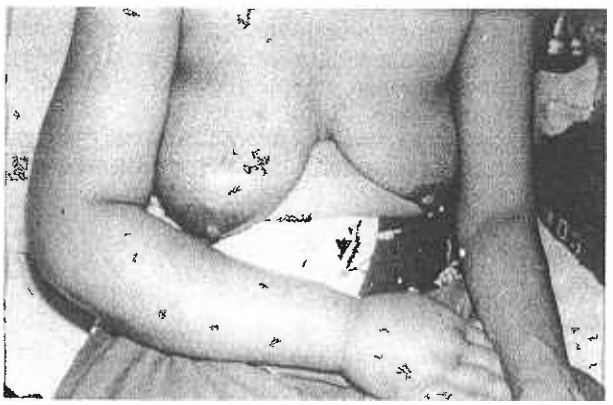

Fig 1: Enlarged right breast and arm due to cardiac failure.

was no obvious mass felt in the breast. The left breast was normal. Tinea lesions were present over the right forearm and chest wall. The lesion over the right forearm also had superimposed secondary bacterial infection. There was a tender lymph node enlargement of 2 cm. in the right axilla. There was a tender hepatomegaly and ascites in the abdomen. Cardiac examination revealed cardiomegaly, pansystolic murmur in the mitral area radiating to the left axilla and a short apical diastolic murmur consistent with mixed mitral valve lesion (predominantly mitral incompetence). The Medical Officer who examined the

patient initially made the provisional diagnosis of congestive cardiac failure and carcinoma of the right breast with secondary in the axillary node. She was listed for lymph node biopsy but this was with-held. Chest radiography showed marked cardiomegaly with giant left atrium. Electrocardiograph was unremarkable.

Urine examination showed proteinuria with 24 hour urinary protein of 2.92 gm. Her Hb. was 13.5gm/dl, total white cell count was 11,300 /cmm and ESR of 30mm/Hr. Her blood urea, electrolytes, random blood sugar and liver function test were all normal.

She responded well to bed rest, fluid restriction, frusemide, and captopril added later on. She lost 19 kg in weight during her six week stay in hospital. The swelling in the legs, right arm and breast resolved completely (fig. 2). Local application of neomycin cream followed by Whitfield ointment and a course of cephalexin cleared her skin infection. The right axillary lymph node enlargement completely resolved in four weeks. Her proteinuria became very minimal during her subsequent follow-up.

She was keeping in a satisfactory condition after 6 months of follow-up. She refused any form of cardiac surgery.

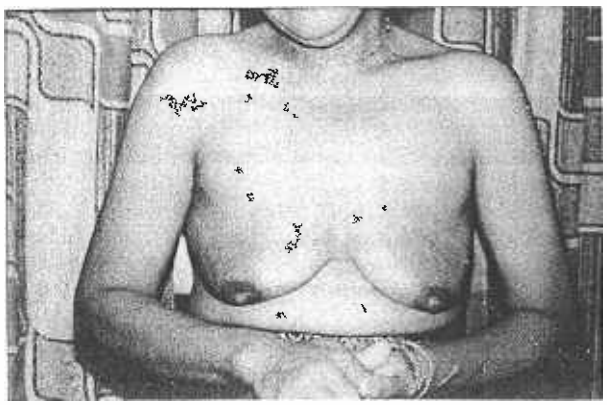

Fig 2: Normal breast and arm after treatment of cardiac failure.

DISCUSSION

Congestive cardiac failure is a common condition and its common manifestations are well known (3). Breast enlargement as a manifestation of cardiac failure is very rarely documented in the literature (4).

Unilateral breast enlargement is generally thought to be due to breast cancer and thus the patient undergoes all the tedious and expensive investigative procedures (4).

Our patient, though admitted several times for cardiac failure, only during the last admission did she present with unilaternal breast and arm swelling. At first she was suspected to have carcinoma of the breast with congestive cardiac failure. The right axillary lymph node enlargement and begin d'orange appearance of the breast further compounded the suspicion of breast cancer. The patient responded dramatically to treatment of cardiac failure with complete resolution of the breast swelling.

Our patient found comfort in lying on her right side and this could very well explain her unilateral oedema of the breast and arm. It was suggested that atrophic breast of elderly women may be more susceptible to oedema than younger tissue (4). Our patient is relatively young and still in the reproductive age group.

It is important to recognise this very rare presentation of a very common condition just to avoid unnecessary investigations.

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