FACTORS INFLUENCING MANAGEMENT OF CARCINOMA BREAST WITH PREGNANCY

(Report of Four Cases)

by

NIRMAL SEN,* M.B.B.S., D.G.O., M.R.C.O.G.

ARUN KUMAR MITRA,** M.O., F.R.C.O.G., Ph.D. (Lond.)

Extragenital carcinoma with pregnancy is receiving increasing interest throughout the world, since it is thought that pregnancy alters the natural history of the disease. When breast carcinoma is diagnosed with pregnancy, it can be infered that the lesion existed for a long time. Thus, the majority of the cases are quite in advanced stage, and prove to be fatal no matter how treated. Harrington (1940) observed that pregnancy with carcinoma breast definitely increased the chances of metastases. Bunker and Peters (1963) reported lowered 5 year survival rate after treatment of carcinoma breast with pregnancy. The effect of pregnancy on the disease and the value of termination of pregnancy in aiding definitive therapy needs proper evaluation.

Four cases of carcinoma breast complicating pregnancy, admitted in 1969-70 and treated at the Eden Hospital, Medical College, Calcutta, are being presented with follow ups and final outcomes.

Case 1

Mrs. B.S., 35 years, Para 3 + 0, was admitted in on 30th September 1969, with

Received for publication on 10-3-1973.

history of five months' amenorrhoea and a gradually increasing lump in the left breast.

The patient had first noticed a nodular lump in the left breast four months back which gradually increased and aquired the present size. The left nipple was everted and the lump occupied both medial and lateral quadrants measuring 8.5 cm x 5 cm. The skin over the lump was ulcerated and fixed to the mass.

The lump was hard with a smooth surface and was free from adhesion to the deeper tissue. The left anterior and medial group of axillary lymph glands were palpable, discrete, hard and mobile without tenderness. The right breast was normal.

Past history of illness: Nothing suggestive.

Obstetric History: Para 3 + 0, all term normal deliveries with uneventful puerperium.

General Examination: Condition fair, Hb-10.8 gm%.

Systemic Examination: Nothing abnormal detected. X-Ray Chest, was clear.

Obstetric Examination: Height of Uterine fundus was 22 weeks, foetal parts palpable.

Biopsy from the growth on histopathological examination showed schirous carcinoma and the clinical staging was carcinoma breast, Stage II.

Management: Termination of pregnancy by abdominal hysterotomy with bilateral oophorectomy was done on 3-10-1969. The growth was treated with 36 exposures of local Telecobalt therapy. The growth receded and the skin ulcer healed up. The

^{*}Ex-Registrar, Eden Hospital, Medical College, Calcutta.

^{**}Professor Obst. & Gynec., Eden Hospital, Medical College, Calcutta.

1972.

Case 2

Mrs. S.R., 30 years, para 6 + 0, was admitted on 3rd May 1970, with history of amenorrhoea for six months and a painful lump in the left breast for one year. The pain radiated to the left arm for the last three months.

The lump in the left breast was first observed one year back and was initially small and stationary for the first six months and aquired the present size of 15 cm x 15 cm occupying all the quadrants of the left breast within last six months. The skin did show 'peau-de-orange' appearance with generalised thickening and pigmentation. The nipple was retracted (Fig. 1). The skin was fixed to the lump, irregular firm in feel with ill defined margins. The mass was adherant to the deeper tissue but free from the chest wall. Left central, pectoral and lateral group of axillary glands were palpable discrete, hard, mobile without tenderness. The right breast was normal.

Biopsy from the growth on histopathological examination showed schirous carcinoma and the clinical staging was Stage IV Carcinoma breast with pregnancy.

Past history of illness: Nothing relevant. Obstetric History: Para 6 + 0, all term normal deliveries, last childbirth 3 years ago.

General Examination: General condition poor, Hb-7.8 gm%.

Systemic Examination: There was evidence of plueral effusion on the left side of chest, confirmed by skiagraphy.

Obstetric Examination: Height of uterine fundus was 24 weeks, head presenting, foetal heart sounds heard.

Management: Termination of pregnancy by abdominal hysterotomy with bilateral oophorectomy was done on 11-5-1970. The growth was treated by total mastectomy, followed by a course of radiotherapy. The general condition of the patient deteriorated and she died in 8 months.

Case 3

Mrs. S.S., 28 years, para 0 + 0, married January, 1970 with a history of amenor- in three months a lump appeared in the

patient is alive and well till December, rohea, three months and a swelling of the left breast first noticed since July, 1969. The lump gradually increased in size and extended to the upper outer quadrant of the left breast measuring 7 cm x 7 cm. The mass was uniform and free from deeper structures. The skin was free. The left axillary lymph nodes were just palpable and mobile. The right breast was normal.

> Biopsy from the growth on histopathological examination showed spheroidal cell carcinoma, and the clinical grading was carcinoma breast stage II.

> Past history of illness: Nothing relevant. General Examination: Condition fair, Hb-13 gm%.

> Systemic Examination: Nothing abnormal detected.

> Obstetric Examination: The uterus was 16 weeks pregnancy size soft.

Management: Being an elderly primigravidae and very keen for a baby the pregnancy was allowed to continue. Radical mastectomy was done in January 1970, followed by post operative telecobalt therapy in February, over the breast area and internal mammary chain of glands for 3 weeks and for another 3 weeks to the axillary and supracalavicular area, a total of thirty exposures. All due precautions were taken to shield exposures to the growing foetus. Pregnancy continued and the patient developed mild toxaemic features which were controlled by rest and diuretics. Elective lower segment caesarean section was done at 38 weeks delivering a healthy female baby. The lactation was suppressed by injection Aquaviron 50 mgm. Bilateral oophorectomy was done six months later. The patient is doing well and the girl growing naturally.

Case 4

Mrs. A.D., 30 years, para 2 + 1, was admitted, as an emergency, in September, 1970 with history of amenorrhoea of thirtyfour weeks. The patient was in labour for three hours.

There was a fungating ulcer on the right side of her chest, with extreme oedema of the right upper extremity (Fig. 2). The patients had first noticed a lump in the for six years, attended antenatal clinic, in right breast which quickly grew and withleft breast. Patient had radical mastectomy in November 1969 and in April 1970 respectively for the right and left breast followed by radiotherapy.

The patient first attended Eden hospital antenatal Clinic at 28 weeks of pregnancy for Severe anaemia and hypoproteinaemia. Hysterotomy with oophorectomy was recommended but the patient refused termination and left hospital on request.

General Examination: General condition was very poor, with severe anaemia and cachexia.

Patient delivered a premature male baby normally.

Patient was discharged on request and died of cachexia and exhausion in 6 weeks.

Discussions

Many factors require a critical assessment in planning management of a case of carcinôma breast with pregnancy. The disease spreads rapidly during pregnancy. It is only curable if it is still localised and is of a favourable microscopic type. The various reports when compared, leaves the problem as to whether termination of pregnancy enhances the chances of 5 years unsolved. The survival rate is distinctly higher in non-pregnant cases treated for carcinoma breast.

Cade (1964), while discussing cancer breast with pregnancy expressed that termination of pregnancy helps in determining surgical or radiological treatment cure rate. Eight of his cases out of fourteen having therapeutic termination were alive and well after treatment of carcinoma breast, as compared to eight deaths out of ten patients, where pregnancy was allowed to continue and cancer breast treated. Out of thirteen patients who conceived after radical mastectomy recredescence followed in eight patients. Among the remaining five cases three had termination of which two survived.

Hobbel and Farrow (1962) presented

a data which showed that therapeutic termination had little effect on survival rate of cases treated for carcinoma breast with pregnancy. Bunker and Peters (1963) observed that survival rate was 80% per cent where carcinoma breast was treated prior to pregnancy, 40 per cent if treated during pregnancy and 35 per cent in lactational group.

The question of termination of pregnancy therefore requires a critical appraisal. Cade (1964) stressed that termination of pregnancy improves the ultimate prognosis, some contradicted that termination had little effect on the final outcome of treatment. Hobbel and Farrow (1962) compromised by considering termination on the clinical staging of the disease and duration of pregnancy, when carcinoma breast was diagnosed.

Metastases were more frequent, with pregnancy, by Miller (1962). Thirty, (66.6%) out of 45 cases reviewed had axillary metastases. Treves and Hobbel (1958) found metastases in 58.6 per cent cases below the age group of 35 years. Haagensen (1967) in his note of natural history of breast carcinoma emphasised on the simple yet descriptive classification of the disease determining the outcome and survival rate. According to him the presence of the following findings influence the prognosis. (i) Oedema of the skin. (ii) Ulceration of the skin. (iii) Solid fixation of the Carcinoma of the chest wall. (iv) Axillary nodes more than 2.5 cm. in size. (v) Fixation of the axillary nodes to the overlying skin.

Haegensen reported 7.3 per cent contralateral breast carcinoma with pregnancy.

The outcome of Radical mastectomy is poorer in young women in the child-bearing age. In this series, the patients mere aged 35, 30, 28 and 30 years.

Haagensen (1967) stressed termination in young patients in early month of pregnancy in selected cases of well circumscribed growth with no glandular metastases. In one case of this series the patient was an elderly primigravidae and was allowed to continue her pregnancy. Patient is still alive and well. Thus, parity is another important factor to have serious consideration before termination of pregnancy is planned.

Summary and Conclusion

Four cases of carcinoma breast with pregnancy are presented. In two cases the pregnancy was terminated and in the other two it was continued. The first case survived and is well following termination and subsequent radical teatment and the third case is also doing well where pregnancy was allowed to continue with concurrent surgery and radiotherapy. One of our cases had contralateral lesion.

It appears that the stage of the lesion and its histological grading determines the outcome, irrespective of the size of the tumour. As regard the principal of definitive treatment the usual guidelines generally followed are, (i) termination of pregnancy in multigravidae in the first trimester, otherwise it may be allowed to continue to a viable age, (ii) radical mastectomy in stage I with histological

grade I intraductal, papillary or circumscribed growth, (iii) in stage II and III cases of breast carcinoma, in presence of lymph node metastases, radiotherapy with oophorectomy is a better proposal.

Termination of pregnancy offers a limited value in aiding definitive treatment by reducing hormone levels, size and vascularity of the growth.

Acknowledgement

We are thankful to Dr. K. N. Mitra—Director Professor Obst. & Gynec, Eden Hospital, Medical College Hospital, Calcutta, for his constant encouragement, and to Dr. D. Day Mahasay Principal Superintendent, Medical College and Hospital, Calcutta for his kind permission to publish hospital record.

References

- Banker, M. L. and Peters, M. V.: Amer. Jour. Obst. & Gynec. 85: 312, 1963.
- Cade, S.: Jour. Obst. & Gynec. Brit. Cwlth. 71: 341, 1964.
- Harrington, S. W.: Penn. Med. Jour.
 43: 413, 1940.
- Haagensen, C. D.: Amer. Jour. Obst. & Gynec. 98: 141, 1967.
- Hobbel, A. I. and Farrow, J. H.: Surg. Obst. & Gynec. 115: 65, 1962.
- Miller, H. K.: Amer. Jour. Obst. & Gynec. 83: 607, 1962.
- 7. Treves, N. and Hobbel, A. I.: Surg. Gynec. & Obst. 107: 271, 1958.