Management of breast cancer

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Carcinoma of the breast represents today a major problem to surgeons, patients and community. The incidence of breast cancer has increased during the past half century throughout the world, it represents today about 1/4 of all registered cancers in women and causes about 4% of all deaths. Breast cancer is more common in old, white, unmarried women of early menarche and late menopause, of low parity and late first full term pregnancy, with a past history of breast cancer or fibrocystic disease of the breast and with a family history of breast cancer in first degree relatives. Of the different systems of clinical staging of breast carcinoma there are the ”Manchester system”, the ”Columbia Clinical Classification”, the ”TNM” system, the ”International system”, and the ”American system”. Many histopathological classifications have been suggested, of the classical classifications there are the ”Foote and Stewart topographic classification”, the ”Symmer’s classification”, the ”Kouchouko’s classification”, the ”World Health Organization classification”, and certain recent classifications have been proposed as that of the ”National Surgical Adjuvant Breast Project”, the classification adopted at the ”Royal Marsden hospital, Sutton” and that proposed by Foster & Neville in 1981.Breast carcinoma presents in different clinical types including : ”Mastitis carcinomatosa”, ”Medullary carcinoma”, ”Scirrhous carcinoma”, ”Atrophic scirrhous carcinoma”, ”Duct carcinoma”, and ”Paget’s disease of the nipple”. Spread of breast cancer occurs through : local spread, lymphatic spread, hematogenous spread, transserous and intraductal spread.Recently there has been a major change in the attitude towards the diagnosis of breast cancer, while clinical diagnosis and histopathological examination of biopsy specimen remain the cornerstone of diagnosis, fine needle aspiration cytology and xeromammography are considered today as the commonest preoperative diagnostic techniques. We have presented a diagnostic program in breast cancer divided in three parts : clinical diagnosis, special investigations and screening.I - Clinical diagnosis includes clinical history,clinical examinationand clinicopathologic correlation.II- Special investigations include:A.Investigations to detect local lesion as biopsy, aspiration cytology and radiographic investigations including mammo-graphy, xeromammography, thermography, ultrasonography and breast scanning.B.Investigations to detect lymphatic metastases as lymph node preoperative scanning, or lymph node biopsy.C.Investigations to detect distant metastases as imaging physical)techniques including chest X-rays, bone scanning, liver scanning and ultrasonography. Biochemical markers evaluation is today considered as a sensitive index to detect distant metastases at a stage when conventionalphysical techniques are normal.III-

Screening populations of women by a combination of radiology and clinical examination may pick up tumours of subclinical type. It is important to differentiate the lump of breast carcinoma from many other benign lumps which may simulate it as fibroadenoma, mammary dysplasia, intraductal papilloma, fat necrosis, galactocmle, chronic breast abscess, mammary duct ectasia and adenoma of nipple. The identification of mstrogen receptors (ER) in the cells of of breast cancer explained some of the effects of endocrine manipulation in treatment of breast cancer. ER was found in 55% ofpatients with breast cancer, and it was found that 55°/0 of patients with ER +ve responded to endocrinal therapy while only 5% with ER -ve responded. Treatment of breast cancer is divided into two headings according to the operability of the tumour, curative treatment for operable tumours in stage 1,11, and selected patients in stage III and palliative treatment for inoperable tumours in stage III, and stage IV.I - Curative treatment : Its aim is to get rid of the primary lesion, to prevent the locoregional recurrence, to prevent distant metastases and to eliminate extensive local surgery from those patients who will not benefit from it. It includes :A. Surgical management, which in last two decades have witnessed a conflict of three major trends, the traditional radical surgery, the extended radical surgery, and the conservative surgery.B.Primary radiotherapy, which is proving today to be an attractive alternative to radical surgery for early breast cancer.C.Adjuvant therapy including :1- Adjuvant radiotherapy which proved to be effective preoperatively in ”borderline inoperable tumours”, and postoperatively if there is lymphatic metastases, if the tumour is larger than 5 cm, if it is cut through or there is residual tumour leftin the operative field.2 - Adjuvant chemotherapy which proved to be effective in patients with axillary node metastases and ER -ve, and in patients without axillary node metastases but with ER -ve.3 - Adjuvant endocrine therapy, does prophylactic ovariectomy delayed relapse and prolonged survival remain till now a question with no sure answer.- Palliative treatment : In advanced or metastatic breast cancer, widespread dissemination has already occured, and the aim of management is the successful palliation of patients symptoms, withthe minimum induced morbidity. It includes :A. Endocrine manipulation :1 - In premenopausal,bilateral ovariectomy is the initialtreatment, followed by ablative surgery or hormonal administration in case of relapse.2 - In postmenopausalotamoxifene is the initial treatment followed by ablative surgery or hormones in case of relapse.B. Chemotherapy, which is effective in three classes of patients those with disseminated breast cancer who failed hormonal manipulation, those with rapidly advancing widespread disease, and those with metastatic tumours lacking ER. Chemotherapy programs may be ”single agent program”, or ”combination program”.C. Radiotherapy is an effective measure for locally recurrent tumours, for brain metastases and for bone metastases. Finally, about the prognosis of breast cancer it was found that the axillary node status, the clinical stage, the tumour grade, the pathologic type of the tumour and its size are today the most important prognostic factors.