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# Management of cancer breast

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After reviewing the anatomy of the breast and its blood supply and lymphatic drainage in full details, the physiology of the breast was also reviewed. The changes that occur in the breast since birth and the changes that occur during each menstrual cycle and that which occur during pregnancy, lactation and involution were also discussed. Also, the effects of individual hormones were summarised. Breast cancer is the commonest malignant tumour in the Egyptian females presenting about 41% of cancers in females and 1.4% of all cancer in males. Breast cancer arises in 60% in the upper outer quadrant, 12% in the upper inner quadrant, 12% in the central region, and 10% in the lower outer quadrant and 11% in the lower inner quadrant (Rains and Hitchie, 1981). Pathological classification of breast cancer is to provide standardization of therapy of operable breast cancer and to offer a method for determining prognosis. - 139 - The primary focus of carcinoma within the breast tissue grows by division of its constituent cells, infiltrating the breast tissue. Spread of breast cancer by migration of the tumour cells within the breast, lymphatic spread to regional lymph nodes and blood dissemination was discussed in details. For successful treatment of breast cancer, there is great need of early diagnosis of what is called minimal breast cancer. Diagnostic aids of early breast cancer detection are, clinical examination, biopsy (including needle biopsy, fine needle aspiration biopsy, the ordinary, intraductal biopsy and smear of nipple discharge), mammography and its indications, xeroradiography, ultrasound, thermography, and urinary estriole excretion were discussed to evaluate the best methods aiding for early detection of breast cancer. Also, investigatory procedures for established cases, such as (estrogen, progesterone and androgen receptors), pregnancy specific B, glycoprotein and - 140 - detection of immunologic reactivity in breast cancer patients. The investigatory procedures for metastatic cases, as iso-ferritin estimation, carcino-embryonic antigen, gross cystic disease fluid protein radioimmunoassay, and scintigraphy were also discussed. In the part that discussing clinical staging of cancer breast, the Manchester classification, Columbia classification and the T.N.M. system that was recommended by the Union International Centre de Cancer, were mentioned. Ideal treatment of breast cancer must provide a local control of the tumour preventing both local recurrence and systemic dissemination. Considering the surgical treatment, several operations are competing for acceptance as the best, surgical treatment of primary, potentially curable breast cancer, indicating that there is no single operation that can be considered the only one suitable for all cases. - 141 - These several operations are

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local excision (lumpectomy), simple mastectomy, modified radical mastectomy, radical mastectomy, extended radical mastectomy, extended radical mastectomy plus supraclavicular dissection, extended radical mastectomy plus supraclavicular dissection plus internal mammary and mediastinal lymph node dissection, radical mastectomy combined with interscapular thoracic amputation and radical mastectomy with full-thickness resection of the underlying chest wall. Also the treatment of inflammatory breast cancer and the reconstruction of breast after mastectomy with its indications and timing was discussed. Radiotherapy of breast cancer may be used as a primary treatment aiming for cure of the disease or as a preoperative, postoperative measure or as adjuvant therapy to surgery or as a palliative therapy in the presence of local or systemic recurrence of the disease. Hormonal therapy of breast cancer is employed when surgery and irradiation have failed or when widespread metastasis have rendered them useless. By clinical trial, endocrine therapy prolongs disease-free interval at the expense of minimal toxicity but no effect on crude survival (Baum and Berstock, 1982). Endocrine therapy including administration of hormones or ablation of the ovaries, adrenals or pituitary gives response in about ~ of breast cancer patients (Giulino and Wilson, 1983). A blative endocrine therapy is based on the concept that certain breast cancer with high concentration of estrogen receptors are sensitive to hormonal stimulation similar to the normal breast tissues and resultant tumour regression may be induced by lowering the level of the circulating hormones. Additive endocrine therapy as estrogen therapy, progestin therapy, anti estrogen (nolvadex) therapy, androgen therapy and corticosteroid therapy was mentioned in details. The modern use of anti-steroid anti-inflammatory agent (flurbiprofen) which can inhibit prostaglandin biosynthesis was also discussed. Chemotherapeutic agents may be used as an