Breast cancer: detection markers, prognosis, and prevention

Abstract

Breast cancer is the common invasive cancer with high mortality worldwide. High incidence of breast cancer in South and central America, Southren, Northren, Westren Europe, Ocenia and North America. Lowest breast cancer incidence in Africa and Asia. Risk factors includes: female sex old age, lifestyle, oralcontraceptive, hormone replacement therapy, mutations in the breast cancer susceptibility genes BRCA1orBRCA2.alcohol intake, hereditary factors, and exposure to chemicals. Breast cancer occurs because of an interaction between external factor and genetically susceptible host. Frequent symptoms of breast cancer is typically a lump and lumps found in the lymph node in the armpits. Diagnosis by physical examination of the breast and mammography. Further tests include histopathological examination, breast cells grading by TNM systeme.g., Zero stage a precancerous or marker condition, stage 1- 3 within the breast and regional nodes, and stage four is metastatic stage. Management of breast cancer depends on the stage of the cancer and age of the patient. Usually treated with surgery, chemotherapy or radiation therapy or both. A multidisciplinary approach is preferable. Metastatic cancer has less favorable prognosis. Prognosis is usually the probability of progression-free survival(PFS) or disease free survival(DFS).Prevention include change in life style, maintaining healthy weight, less alcohol consumption, and intake of marine omega-3 and soy-based foods Prophylactic mastectomy(removal of both breasts) helps in people with BRCA1 and BRCA2 mutations. Early detection of breast cancer has better prognosis.