Comparative Case Reports Of Breast Lumps: Ductal Breast Cancer, Medullary Breast Cancer And Granulomatous Mastitis

Nasim Ahmed[1], Maleeha Hussain[2], Syeda Hasina Azam[3], Syeed Ahmed Siddiky[4], Khalid Bin Islam[5] and Tahmina Choudhuri Islam[6]

Abstract

Four interesting cases are presented here in a comparative study where clinical and histological elements of differences are highlighted and brought to consideration. They belong to invasive ductal breast cancer (DBC), medullary breast cancer (MBC) and granulomatous mastitis (GMas).The DBC cases were detected at a late stage and were histologically poorly differentiated and negative for estrogen receptor (ER). Clinically, they had poor prognosis. The MBC presented with a circumscribed lump and was diagnosed on excision biopsy. Histologically, the tumour cells were large, pleomorphic with syncytial arrangement, but the prognosis was good. The GMas case presented with a lump and histologically showed an inflammatory lesion with epitheloid granulomas destroying large areas of the breast architecture. The comparison of these cases will allow distinct demarcations and correct diagnosis to be made promptly. Importantly, they will help in the differential diagnosis and create awareness so that early detection of breast cancer takes place.

Introduction

Breast cancer is one of the leading killer diseases in the female and can be curable when detected early. This is only possible if awareness among the patients is enhanced for early detection and correct, prompt diagnosis. Furthermore, self education and examination, along with routine cancer screening has to be performed. Genome-wide expression profiles using microarray have given us a wide range of new information leading to the identification of subtypes and disease markers[1-4]. Importantly, biomarkers for early detection of the breast cancers that vary in histology and clinical course are being further evaluated. Molecular classification breast cancer based on expression profiling has led to challenging discoveries with clinical significance[1,5]. Accordingly, breast cancers have been classified to four basic types based on histology and markers, such as ER positive DBC, other histological types including lobular, ER negative basal-like and Her2neu positive[1]. Recent microarray studies have further evaluated 599 microarrays as opposed to initial 84 arrays by Perou et al and placed the molecular classification to three subclasses having ER positive, ER negative and Her2neu positive groups[1,5]. ER positive usually show better prognosis than ER negative and Her2neu positive group. The large array of data from expression profiles provide information regarding signalling molecules which may help in the identification of newer markers for early detection of breast cancer. Breast lumps, fibroadenomas and their complex versions with fibrocystic change have also been studied in cancer screening programmes [6,7]. In addition, there are also inflammatory benign lesions, which may relapse and may mimic cancer or may be confused with inflammatory breast cancer (IBC). The commonest breast cancer ductal breast cancer (DBC), as opposed to the less common, lobular breast cancer (LBC), medullary breast cancer (MBC), and inflammatory breast cancer (IBC) are discussed here. They need to be carefully demarcated as they differ both in histological and clinical behavior. Four cases and their characteristics are presented below.

Results/Case Presentation

The four cases reported here presented with breast lumps where both benign and malignant lesions

1. *Dr. Nasim Ahmed, Associate Professor, Department of Pathology, Ibrahim Medical College.*
2. *Dr. Maleeha Hussain, Associate Professor, Department of Pathology, NICRH, Mohakhali, Dhaka*
3. *Dr. Syeda Hasina Azam, General Surgeon, Euro-Bangla Heart Hospital Ltd, Dhaka.*
4. *Dr. Syeed Ahmed Siddiky, Plastic, Cosmetic and Laser Surgeon, Cosmetic Surgery Centre Ltd. Dhaka.*
5. *Dr. Khalid Bin Islam, Associate Prof of Molecular Medicine, Gene Cure Health Care. Dhaka.*
6. *Dr. Tahmina Choudhuri Islam, Gene Cure Health Care, Dhaka.*