



Original Contribution

A CASE OF INVASIVE MIXED CRIBRIFORM BREAST CANCER WITH AREAS OF INTRADUCTAL COMEDOCARCINOMA

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ABSTRACT

A rare case of invasive mixed cribriform breast cancer with areas of intraductal comedocarcinoma and with more favourable prognosis was described. The cancer has a unique fungal form and histology. There were no axillar lymph node metastases. Making a precise pathologic diagnosis of this tumour is possible only after collaboration between the pathologist and clinicians.

Key words: invasive mixed cribriform breast cancer, histology, prognosis

INTRODUCTION

The histologic appearance of breast cancers plays major role for the assessment of tumour progression and metastasis (1)

The invasive cribriform cancer is considered as a separate type of the invasive breast cancers, described during the last twenty years (2,3). The peculiar morphologic structure and good prognosis of this tumour permitted its separation as a new clinical and morphologic (2,4). It has no characteristic clinical symptoms and is found after mammography. The macroscopic appearance of the tumour is also non-specific and looks like a firm mass with star like cut surface. Page et al. (5) found 51 invasive cribriform cancers in 1000 invasive breast cancers. They divided these cancers into two groups - pure (n=35) and well-differentiated (n=35) invasive cancers. The size of the pure invasive cribriform cancers ranged between 1 and 14 cm. Only one patient with diagnosis of pure invasive cribriform cancer died, because she had had a simultaneous poorly differentiated cancer in the other mammary gland. The mixed cribriform cancers have a cribriform cancer intermingled with an invasive ductal cancer. The patient's age and their size were slightly higher than those parameters, observed in pure invasive cribriform cancers.

According to Page et al. (5) only six of all 16 patients with cribriform cancers, they had observed, were dead and the cause of death in these six patients was the poorly differentiated invasive ductal cancer that developed parallel with the cribriform one. Venable et al (6) showed that about 62 cases with invasive cribriform cancers comprised 6.2% of all invasive breast cancers. Twelve of them were pure invasive cribriform cancers, 20 had more than 50% cribriform component, and other 30 patients had beneath 50% cribriform component. There was a tendency for association of the invasive cribriform cancer with areas of tubular or intraductal cancer. Only two patients from this study died and both of them had a cribriform component beneath 50%.

DESCRIPTION OF THE CASE

A female patient, aged 44 years, was admitted to the Second Department of Surgery in the University Clinic of Stara Azgora with the history of slowly growing tumour in the left mammary gland.

Clinical data: The two mammary glands were asymmetrical. An exofitic formation was found between the two upper quadrants of the left mammary gland. The formation had lobular surface and firm consistency and was not coalescent with the bone. There were not found increased axillar lymph nodes.

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The lung roentgenography did not show focal changes. The mammography showed a dense lobular formation, sharply delineated in the upper frontal segment. In the parenchyma beneath there was an irregular oval tumour, being 4 to 6 cm in size. There were no calcifications.

Liver echography did not show changes.

Surgical treatment. The patient was operated under common anaesthesia. A firm tumour, not infiltrating the pectoral muscle, was found. It was excised at about 3 cm from the surrounding healthy tissue. Biopsy specimens were collected from suspicious areas. There were no enlarged lymph nodes axillary. Fresh cryostat sections were investigated histologically.

On macroscopic examination the tumour is exophite with a fungal form and sizes of 6 - 7 cm. It was firm with yellow-grey cut surface and lobular margins (**Figure 1**).



Figure 1.

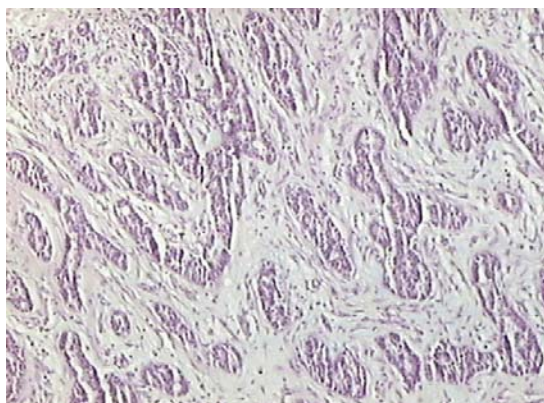


Figure 2.

Histologically biopsy № 3610, 11, 12, 13, 14, 15, 16, 17 from August 2005. In about 80% of the sections there were found nests of epithelial cells with regular shape, such as those, found in the cribriform cancer in situ. Their nuclei were tightly gathered, moderately

polymorphic with rare irregular mitoses. The various large and small cribriform areas infiltrated the desmoplastic stroma (**Figure 2**).

In the other 20% of the sections solid nests with more atypical epithelial cells and many mitoses were observed.

Single tubules with central necrosis were found. They formed comedostructures (**Figure 3**).

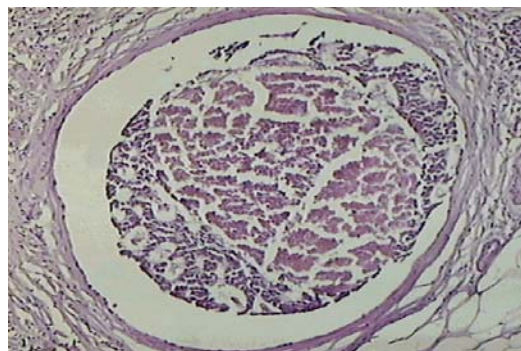


Figure 3.

There was no malignant growth in the resection borders.

DISCUSSION

The present case is a new separate group of invasive breast cancers that have good prognosis for the patients. In fact, the fungal form of the lesion, its location out of the breast, its lobular shape, the lack of necrosis and haemorrhages as well as the lack of axillar lymph node metastases give the impression of a benign tumour (2-4). It had to be differentiated from the breast tumours with adnexial origin (5, 6). Because of the large size of the tumour several cryostat specimens were cut. The diversity of histologic finding, with areas of infiltrating cribriform cancer, invasive ductal cancer and comedocarcinoma (6) makes difficult the precise diagnosis of mixed invasive cribriform cancer with areas of comedocarcinoma. The differential diagnosis was made with tubular cancer, invasive ductal cancer and adenoid-cystic cancer (2-4).

In conclusion we may state that the precise pathologic diagnosis of mixed invasive cribriform cancer is possible only after collaboration between the pathologist and clinicians. Even more, the collection of more tissue blocks from various areas of the tumour enables us to observe the different components of it. The better prognosis of that tumour makes the pathologic diagnosis very important for the patients.

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