

Invention Report

Sclerosing adenosis of mastopathy should be differentiated from scirrhous carcinoma in preoperative histopathological diagnosis

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Sclerosing adenosis of breast was frequently misdiagnosed as scirrhous carcinoma in small pathological specimens and followed an unnecessary treatment against advanced malignancy. Benign lesions including sclerosing adenosis revealed the preservation of normal configuration of myoepithelium, so-called as two-cell-pattern, which malignant lesions including scirrhous carcinoma lost contrastingly. It was, therefore, very important to identify this myoepithelium to differentiate benignancy from malignancy. To decrease these troubles we recommended immunohistochemistry to confirm the two-cell-pattern as benignancy with the reagent against myoepithelium of glandulo-ductal elements. In this report we revealed Anti- α -smooth muscle actin (α -SMA) antibody was one of the most available reagents for identifying myoepithelium immunohistochemically.

Key Words : sclerosing adenosis, misdiagnosis, carcinoma of breast, scirrhous carcinoma, immunostain, α -smooth muscle actin, α -SMA, myoepithelium

A case, 62 y/o, female, was pathologically diagnosed as sclerosing adenosis of right breast, listed as B 06-18903 in our laboratory. Her mammography (MMG) showed many small calcification and radiologically diagnosed as Category 3, which meant malignancy could not be neglected. For preoperative final diagnosis the core needle biopsy were done and 9 specimens were obtained, consisted of 4 samples from calcified areas and 5 samples from non-calcified ones. They were pathologically adequate samples because two specimens had microcalcification, pointed out on MMG. Most specimens showed sclerosing atrophy and few specimens revealed sclerosing adenosis and ductal hyperplasia (Fig. 1).

We performed immunostaining examination on sclerosing adenosis to confirm its myoepithelium as be-

nignancy (1). Our immunohistochemical results was listed in Table 1 : (1) inner ductal or glandular epithelium was positive for AE-1,3 and CAM 5.2 of cytokeratins as epithelial markers (Fig. 2, 3), (2) basal myoepithelium was stained by both the above epithelial reagents (Fig. 2, 3) and myogenic ones (Fig. 4-6). α -SMA reagent was very useful to confirm myoepithelium as benignancy.

References :

1. Ikarashi T. Immunohistochemical application of cytokeratins (#4 and #17 of Moll's classification), S-100 β , and α -smooth muscle actin (α -SMA) as markers of myoepithelial cells to differentiate well differentiated adenocarcinoma of prostate from their related borderline malignancies. Niigata-Ken Koseiren Med J 1998 ; 8 : 38-43.

和文抄録

小さな工夫

術前組織検査において、乳腺症の硬化性腺症は硬癌と明確に鑑別されなければならない

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乳腺症の1重型である硬化性腺症は、術前の小さな標本においては、しばしば、硬癌と誤って病理組織診断される。予防の為に、上皮細胞層と筋上皮細胞層による2層構造の保持を確認して、良性の硬化性腺症であると診断することが大切である。その為に、筋上皮細胞同定の為の、 α 平滑筋アクチンに対する免疫組織学的検査が有効であった。

キーワード： 硬化性腺症、誤診、乳癌、硬癌、免疫染色、 α -smooth muscle actin, α -SMA, 筋上皮

Table 1 Immunostaining result

reagent	reaction	
	epithelium	basal myoepithelium
AE-1,3	+	+
CAM5.2	+	+
CD10	—	±
αSMA	—	+

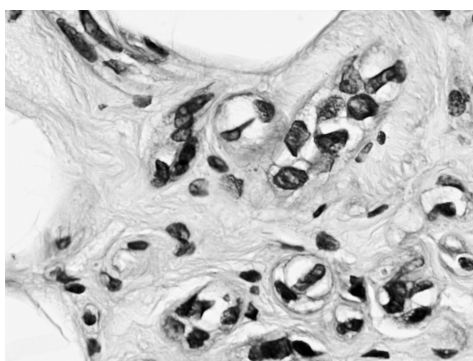


Fig.1 HE

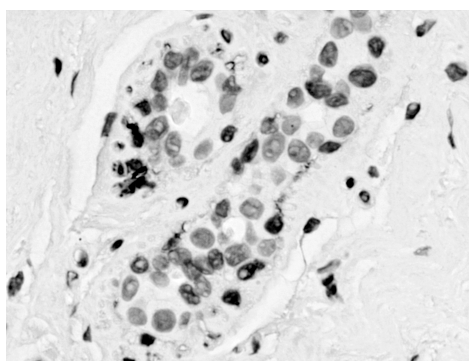


Fig.4 CD 10

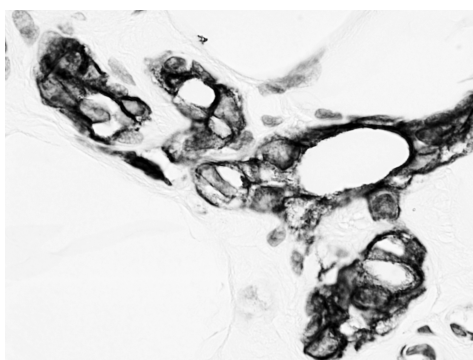


Fig.2 AE-1,3

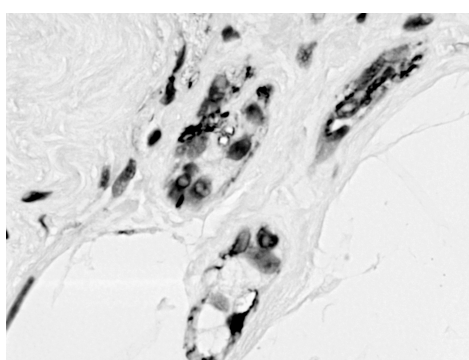


Fig.5 CD 10

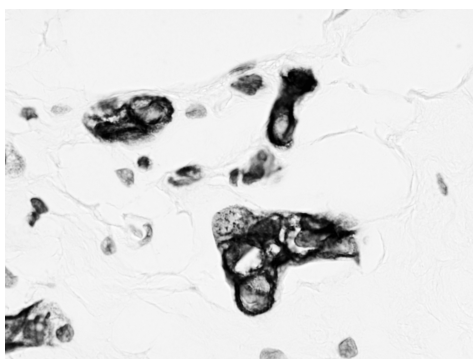


Fig.3 CAM5.2

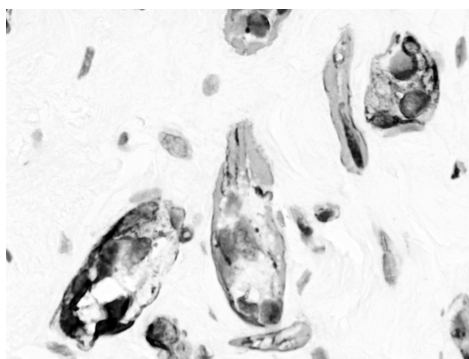


Fig.6 αSMA