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Case of a Cystic Hypersecretory Duct Carcinoma of the Breast

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Breast cystic hypersecretory duct carcinomas (CHDC), characterized by cystic dilatation of ducts, cysts filled with thyroid colloid-like eosinophilic material, and by micropapillary carcinomas in the epithelium lining the cyst, is a rare histological variant of intraductal carcinomas. CHDC is differentiated from cystic hypersecretory hyperplasia. Its clinical manifestations are similar to those of other intraductal carcinomas. CHDC has a low-grade behavior for many years, but can be invasive, with the potential for metastasis. The importance of CHDC is its differentiation from a variety of other lesions of the breast, both benign and malignant. Various differential diagnoses for CHDC include: fibrocystic changes of the breast with microcyst formation, juvenile papillomatosis, benign mucocele-like lesions, juvenile secretory carcinomas, mucin-producing colloid carcinomas and metastatic follicular thyroid carcinomas. Histochemical staining (PAS, alcian blue & mucicarmine) or immunoperoxidase studies (CEA, alpha-lactalbumin and thyroglobulin) may also helpful in differential diagnoses. We report a case of a cystic hypersecretory duct carcinoma (CHDC) of the breast, and present a review of the literature. (J Korean Surg Soc 2002;63:247-251)

Key Words: Breast cancer, Hypersecretory, Cystic

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(Cystic hypersecretory duct carcinoma: CHDC)

(thyroid colloid)
(homogenous eosinophilic material)

(1) (DCIS)

. 1984 Rosen Scott
(subtype) , Herrmann (2) 33 가

(benign)

: 50

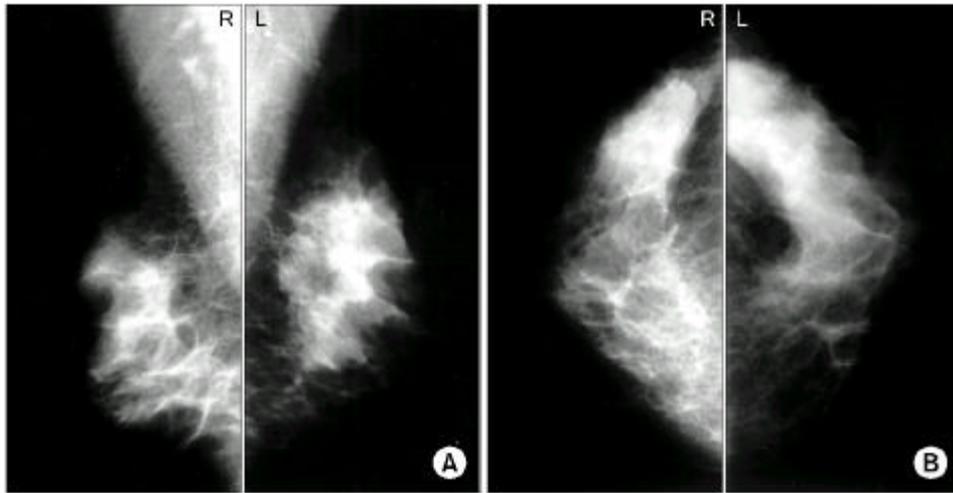


Fig. 1. Bilateral mediolateral oblique (A) and craniocaudal (B) mammograms shows moderately increased density in upper outer quadrant of the left breast.

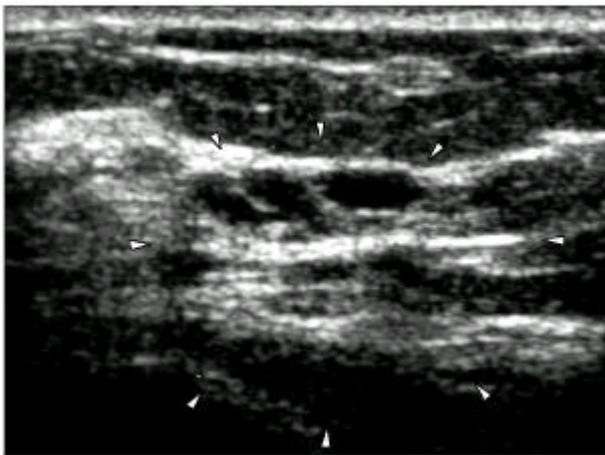


Fig. 2. Ultrasonographic finding shows conglomerated several anechoic cysts without posterior acoustic shadowing.

(CHDC)



Fig. 3. Histologic finding shows multiple thin-walled cysts containing eosinophilic colloid-like material. The virtually acellular homogeneous colloid-like material shows characteristic retraction from the surrounding epithelium(black arrow). A papillary projection of the lining epithelium is visible in the center (white arrow)(H&E stain, $\times 40$).

: 8
 , 8
 , 2
 , 2
 가 : 가 2
 : 4,900/mm³
 13.8 g/dL, 145,000/mm³,
 134 mg/dL, Na⁺ 141 mEq/L, K⁺ 4.2 mEq/L, amylase 86
 mg/dL, AST 31 IU/L, ALT 34 IU/L, BUN 18.3 mg/dL,

creatinine 0.7 mg/dL ,
 :
 가가 (Fig. 1),
 (anechoic cyst)
 (Fig. 2). Technetium (Tc) 99m MDP
 : 4.5×3.5×2.5 cm

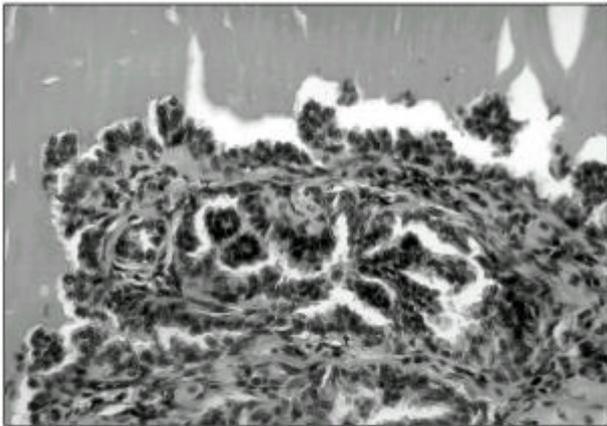


Fig. 4. Histologic finding shows the papillary epithelial projection at higher magnification. It shows many features of micropapillary intraductal carcinoma, such as epithelial crowding, hyperchromasia and enlargement of the nuclei with occasional presence of nucleoli. The papillary fronds show complex branching patterns (H&E stain, $\times 200$).



Fig. 6. The luminal secretion is positive for mucin in this PAS stain (black arrow)($\times 100$).

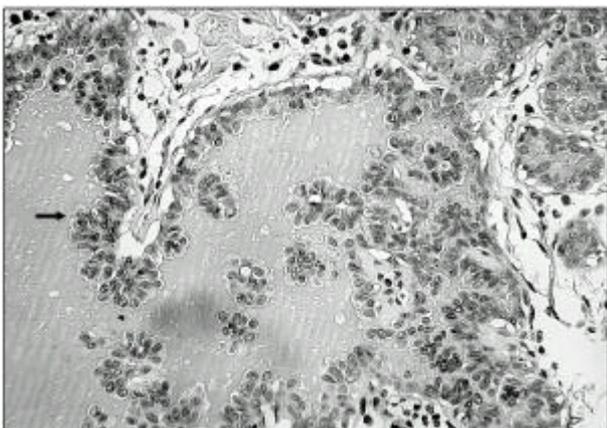


Fig. 5. Higher magnification showing cellular atypia of the lining epithelium. The nuclei are large and pleomorphic, with occasional nucleoli present. Micropapillary intraductal carcinoma components are visible in the right upper corner (black arrow)(H&E stain, $\times 400$).

(Fig. 3),

(Fig. 4). Thyroglobulin , PAS

: 6



(CHDC)

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(1)

0.1 1.3 cm

1 10 cm

(3)

가

(cystic hypersecretory hyper-

plasia, CHH)

(CHH with atypia), 가

(CHDC)

(3)

(flattened cell)

(cuboidal cell)

(columnar cell)

1 cm

4.5

$\times 3$ cm

CHDC

(4)

가

CHDC

(5) CHDC 가

(5,6) 가 CHDC

가가 CHDC

(fine needle aspiration)가

가

Colandrea (5) CHDC

(hypocellular) PAS (para amino salicylic acid), mucicarmine alcian blue

CHDC , CHDC nopero×idase

(multicystic) alpha-lactalbumin CEA

(false nega- (1) CHDC

CHDC (Fibro-

cystic change of the breast with microcyst formation),

(Juvenile papillomatosis),

(Benign mucocele like lesion of the breast),

(Juvenile secretory carcinoma), (Mucin producing

colloid carcinoma of the breast)

(Metastatic follicular thyroid cancer)

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(9) CHDC CHDC (apoc-

rine metaplasia)

(10) CHH

가

(11) CHH CHDC

CHDC (duct papillomatosis),

(papillary hyperplasia), (sclerosing

Diff- adenosis)

Quik bluish-pink color , 'Swiss cheese'

, CHDC (13)

pink-to-purple color , CHDC (8)

(12) Giemsa

Papanicolaou CHDC

(9) 가 CHDC

(polymorphonuclear leucocytes) CHDC (14) 가 CHDC

가 (15)

