

BREAST IMAGES

Synchronous Bilateral Paget's Disease of the Nipple Associated with Bilateral Breast Carcinoma

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The presence of bilateral Paget's disease with the coexistence of two synchronous and morphologically different bilateral breast cancers is extremely rare.

A 73-year-old woman presented with bilateral, red, oozing crusted lesions of the nipple-areola complex. On physical examination, bleeding and crust formation were observed to involve both nipples; the left nipple was retracted and deformed (Fig. 1). The patient had normal mammogram and ultrasound examinations. Exfoliative cytology obtained by scraping of the nipples showed bilateral Paget's disease. The patient underwent bilateral central quadrantectomy with complete excision of the nipple-areolar complex including the underlying breast tissue.

Microscopically the epidermis of both nipples showed characteristic features of Paget's disease. The epidermis contained large round cells with abundant pale cytoplasm. The nuclei had fine chromatin and identifiable nucleoli (Fig. 2). Histologic examination of the right breast parenchyma showed a high-grade intraductal carcinoma with comedo necrosis in the lactiferous ducts with a focal Pagetoid growth pattern and a single focus of stromal microinvasion (Fig. 3a). Histologic examination of the left breast parenchyma showed a 0.8 cm retroareolar micropapillary invasive carcinoma in the nipple dermis with a



Figure 1. Eczema and crust formation on both nipples.

morular cluster of neoplastic cuboidal cells surrounded by empty space and simulating lymphatic tumor emboli (Fig. 3b). The immunohistochemical evaluation of estrogen and progesterone receptor status was positive in the left lesion.

Left axillary lymph node dissection was subsequently performed and histologic examination showed that the invasive micropapillary carcinoma had metastasized to 1 of 14 axillary lymph nodes. The patient was then treated with bilateral radiotherapy and Tamoxifen.

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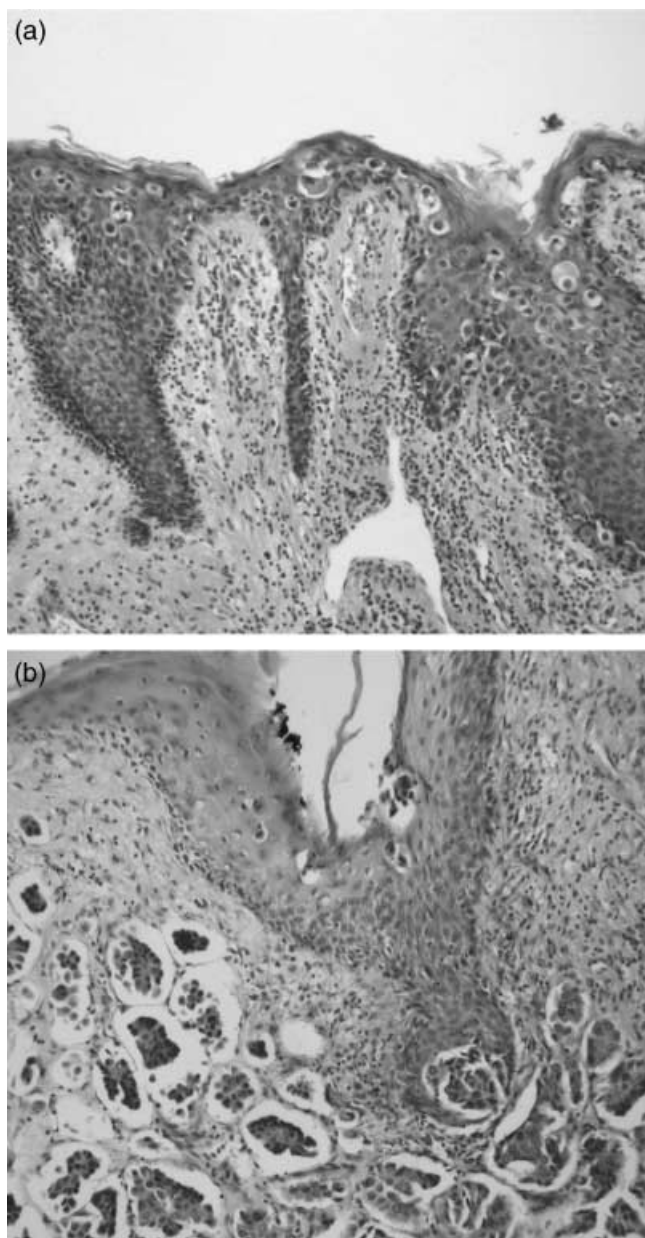


Figure 2. (a) Right and (b) left breasts. The epidermis of both nipples shows characteristic features of Paget's disease.

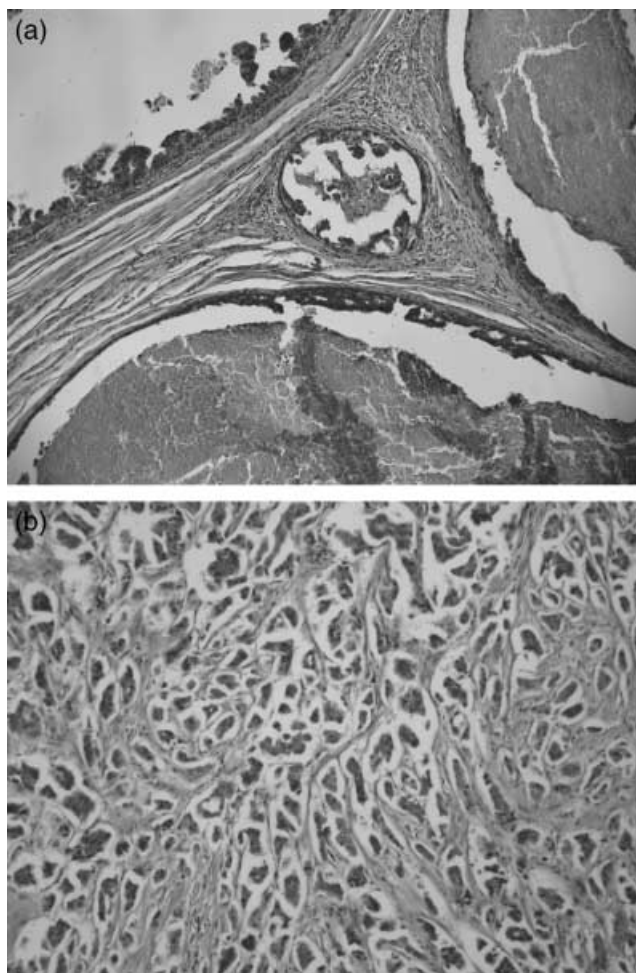


Figure 3. (a) Right breast parenchyma with a high-grade intraductal carcinoma. (b) Left breast parenchyma with a retroareolar micropapillary invasive carcinoma.