Fungating Massive Growth through the Overlying Skin of the Breast

A case of benign cystosarcoma phyllodes in Kenya

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ABSTRACT : Cystosarcoma phyllodes, a rare but impressive tumor of the breast, was first described and named by Müller (1838). Although this tumor occasionally distends overlying skin to such an extent that pressure of it produces discoloration, ulceration, fixation or retraction of the skin, the tumor does not usually adhere to and invade the skin. We found only five reported cases of cystosarcoma phyllodes showing fungating growth through the overlying skin (Lee *et al.*, 1931) since 1827. The following case represents a huge fungating growth of benign cystosarcoma phyllodes without necrosis through the overlying skin.

CASE REPORT

The patient, a 35-year-old female, was admitted to the Rift Valley Provincial Hospital, Nakuru, Kenya, on February 7, 1974. She complained of swelling of the right breast of 7 month's duration. She had noticed a non tender swelling in the right breast which rapidly increased in size to a huge fungating growth through the overlying skin. She had six children. The last one was 5 years old. She had nursed them all without difficulty. There was no past history of breast disease.

Examination revealed a large fungating tumor occupying almost entire region of the right breast. It measured 15×10 cm in size. On palpation, the fungating portion of the tumor was well delineated in the surrounding skin and also softer than that of ordinary

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breast carcinoma. The fungating mass had a slight tendency to bleed and ooze. The skin surrounding the fungating mass was edematous. The breast tumor was well circumscribed from the surrounding mammary as well as underlying muscular tissues. There were no enlarged axillar lymph nodes. There was no evidence of metastasis to lung or bone. Mammography showed well circumscribed tumor shadow suggesting well differentiated breast carcinoma. Hormonal investigations were not performed. Past history was non-contributory. The peripheral blood examination showed moderate anemia and slight leucocytosis with normal differential counts. The remainder of laboratory studies revealed no abnormality.

It was believed that this tumor was most likely a circumscribed carcinoma proliferating outward through the overlying skin. On February 12, 1974, radical mastectomy with a block dissection of axillary fatty tissue through the Halsted's incision was performed. The tumor was located in the anterior portion of the mammary gland from which the massive fungating tumor arised. However, there was no macroscopic invasion to surrounding mammary tissues as well as underlying muscular structure.

Gross examination of specimen revealed multilobulated and sharply circumscribed tumor on section. The tumor bulged from the surface and contained a mixture of firm, white, tissue having multicystic nodular formation filled with gelatinous and mucinous substances.

Microscopically, typical intracanalicular pattern, cellular stroma without atypical features and very long clefts lined by cylindrical and cuboidal epithelium were observed. Epithelial lining is single or double cell layer characteristic of normal breast duct. In other areas adenofibromatous appearances with absence of cellular atypism were seen. However, in outer area of fungating mass, inflammatory changes were noted. Islet-like remains of epidermis were present at fungating portion of the tumor. The epidermis pressured by expansive tumor was atrophy. The diagnosis was benign cystosarcoma phyllodes. No metastasis was found in axillar lymph nodes.

COMMENTS

A total of 35 patients with breast disease were operated at Rift Valley Provincial General Hospital in Nakuru, Kenya, between July 1, 1974 and September 20, 1975, and 14 patients of them had breast cancer including a case of bilateral cancer of a male patient. 16 patients with chronic or acute mastitis, two patients with trauma of the breast, two patients with fibroadenoma and one patient with cystosarcoma phyllodes, which was presented in this paper, were also treated.

The usual treatment for cystosarcoma phyllodes is simple mastectomy unless definite malignant change is seen. Radical mastectomy was applied to this case because of preoperative diagnosis of breast cancer.

Fungating growth through the overlying skin in cystosarcoma phyllodes occurs very rarely. In the original series of 105 cases reported by Lee and Pack (1931), only five of their patients presented fungating appearance. Up to this report, such a case has not been reported in the literature. It is well accepted that overlying skin involvement is solely

related to the size and rapid growth of the tumor (Lester *et al.*, 1954, McDivitt *et al.*, 1967, Miller, 1838 and Trever *et al.*, 1951). However, previous reports have not mentioned histologic feature of fungating portion without necrosis in cystosarcoma phyllodes. Pathological studies of present case revealed islet-like remains of epidermis. And our case should be added to the small number of benign cystosarcoma phyllodes which showed a huge fungating massive growth through the overlying skin.

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巨大な皮膚外発育を示した cystosarcoma phyllodes の一例.

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Cystosarcoma phyllodes は組織学的に良性であるとき，乳房皮膚外に発育することは非常に稀れである。ケニア国リフトバレー州ナクール病院で組織学的に良性の cystosarcoma で乳房外に壊死を伴なわず巨大な発育を来した1例について，臨床病理学的検討を加えて報告した。

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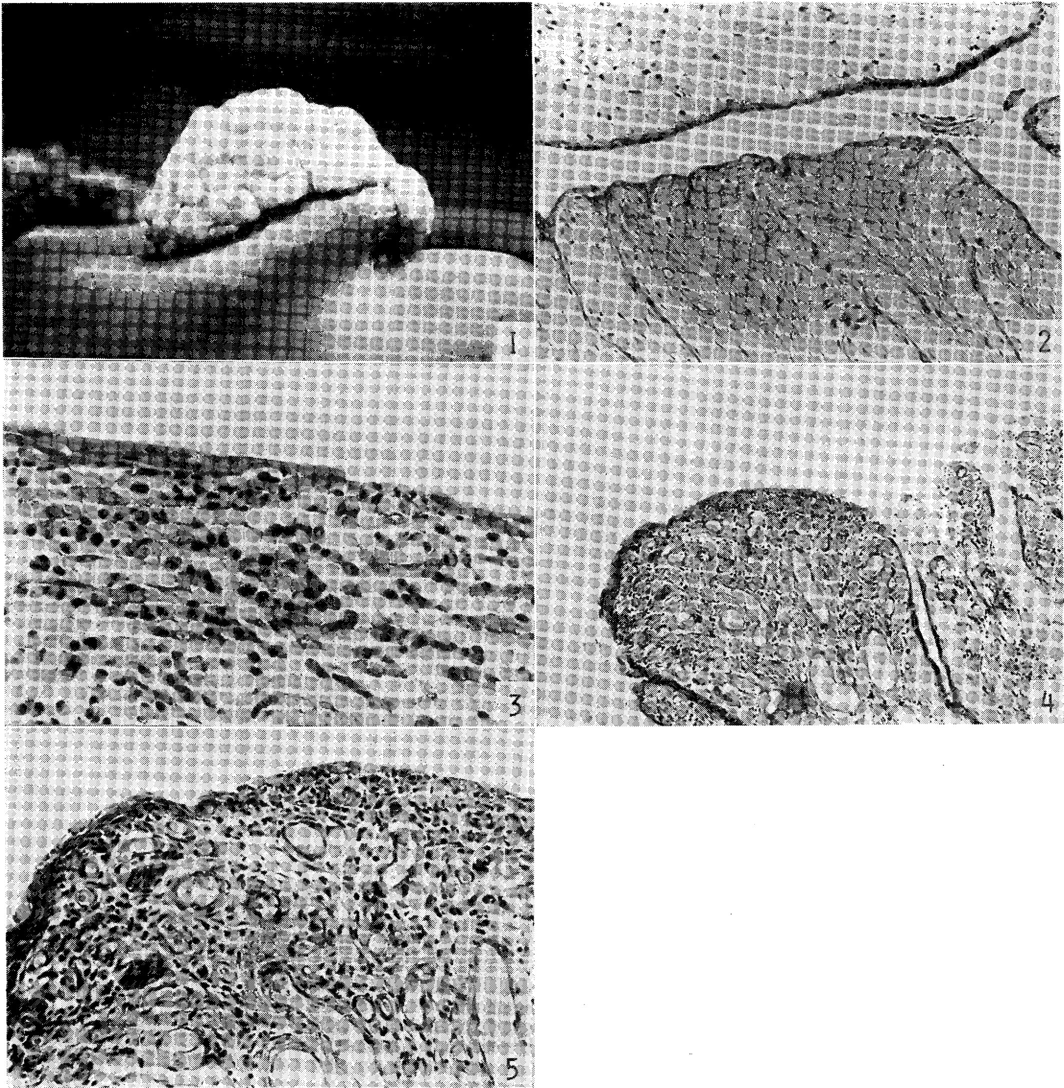

Fig. 1 Massive fungating growth of benign cystosarcoma phyllodes. Note no evidence of necrotic change.

Fig. 2 Cellular stroma without atypical features was observed. Very long clefts were lined by cylindrical and cuboidal epithelium (H and E, x 100).

Fig. 3 Stroma of outer parts of the tumor showing inflammatory cell infiltration (H and E, x 200).

Fig. 4 Stroma with inflammatory change at the fungating portion of the tumor. Note islet-like remains of the epidermis (H and E, x 50).

Fig. 5 High power view of fig. 4. (H and E, x 200).