A GIANT EXULCERATED PHYLLODES BREAST TUMOR - A CASE REPORT

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GIGANTSKI EGZULCERISANI FILODNI TUMOR DOJKE – PRIKAZ SLUČAJA

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ABSTRACT

Phyllodes tumors of the breast can be benign, malignant, or borderline. Benign and borderline tumors are rare tumor types that have a positive outlook and high survival rate, while the risk of recurrence is typical for malignant breast tumors. Giant phyllodes tumors are larger than 10 cm in diameter and demand a serious diagnostic and treatment approach.

In this study we present a case of a female patient treated for an exulcerated breast carcinoma- a giant borderline phyllodes tumor of the breast. The patient presented to the department for the right breast lump with ulcerated skin and nipple abnormalities. The core biopsy was performed and the patient was diagnosed with a benign tumor. Simple mastectomy was performed and final histopathological report revealed a borderline phyllodes tumor. Diagnosis and treatment of a giant phyllodes tumor remain a great challenge for the surgeons. Establishing the preoperative diagnosis based on histopathological findings is imperative to disease management. Surgery is the mainstay of treatment and mastectomy has been the traditional procedure; in cases where suspicious findings in the axilla are revealed, radical mastectomy is performed and the axilla is to be dissected.

Keywords: *phyllodes tumor, borderline tumor, breast, mastectomy*

SAŽETAK

Filodni tumori dojke mogu biti benigni, granični i maligni, to je retka vrsta tumora dojke sa dobrom prognozom i preživljavanjem kod benignih i graničnih tumora ali i sa značajnim procentom recidiva posebno kod malignih tumora. Tumori veći od 10 cm u prečniku su gigantski filodni tumori i zahtevaju ozbiljan pristup u dijagnostici i lečenju.

U ovom radu prikazujemo slučaj bolesnice koja je lečena zbog gigantskog egzulcerisanog graničnog filodnog tumora dojke. Bolesnica se javila hirurgu zbog tumorski izmenjene desne dojke sa prisutnim egzulceracijama na koži i deformisanom bradavicom. Urađena je CORE biopsija koja je ukazala da je tumor benigne prirode. Urađena je prosta mastektomija i definitivni patohistološki nalaz je ukazao da se radi o graničnom filodnom tumoru. Dijagnostika i lečenje gigantskih filodnih tumora predstavlja izazov za hirurga. Postavljanje preoperativne pato-histološke dijagnoze treba da bude imperativ. Lečenje gigantskih filodnih tumora podrazumeva prostu mastektomiju, osim kod klinički i dijagnostički sumnjive aksile kada je potrebno uraditi i radikalnu disekciju.

Ključne reči: *filodni tumor, granični tumor, dojka, mastektomija*

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INTRODUCTION

Phyllodes tumors of the breast are rare tumor types that contain two types of breast tissue: stromal - connective tissue and glandular tissue. (1) This tumor type was first described in 1838 by Johannes Muller. (2) Phyllodes tumors of the breast account for less than 1% of the breast tumors and they are mostly seen in women between 45 and 49 years old. (3) The World Health Organization classified them histologically as benign, borderline, or malignant. Benign tumors are more frequent having an incidence of 40-50%. (4) The phyllodes tumors can resemble fibroadenomas and the distinction between phyllodes tumor and fibroadenoma is clinically important, as these two tumor types require adequate treatment options. The median size of phyllodes tumors is around 4 cm. (5) Giant phyllodes tumors are those larger than 10 cm in diameter and account for about 20% of all phyllodes tumors; rarely they can reach sizes up to 40 cm in diameter. (6, 7) Management of the giant phyllodes tumor presents diagnostic and treatment challenges for the surgeon. Ulceration of the skin of the breast is not typical for phyllodes tumors and therefore it can present a diagnostic dilemma.

In this study we present a case of a female patient treated for an exulcerated breast tumor - a giant borderline phyllodes tumor of the breast.

CASE REPORT

A 59-year-old female patient G.S. presented to the department in our hospital with a giant exulcerated tumor of the right breast in July 2017. She reported that she had had an injury of the right breast in 2004 and a few months after the injury she noticed a firm palpable breast mass. The mass grew quickly and quite large every year, and a year before the surgery, the patient noticed wound-like skin changes in the breast. She got her first menstrual period at the age of 12, she had two deliveries and two miscarriages; the last period was at the age of 50. A clinical breast examination (inspection) showed a giant mass occupying the whole right breast with ulceration. The palpable breast mass was firm, with ill-defined borders, occupying the entire right breast. (figure 1) There were no palpable axillary lymph nodes. The left breast appeared normal. The ultrasound revealed a large heterogeneous mass with some cysts in the right breast. Axillary lymph nodes up to 6mm were present. Freehand core biopsy was performed and specimens were sent for pathological examination. The histopathological findings indicated a benign phyllodes tumor. A radical surgery was to be done based on the decision of the consilium of oncologists. The patient underwent a right simple mastectomy (figure 2), and the patient was discharged on the fourth postoperative day. Histopathological findings showed that tumor tissue was of moderate cellularity, with dual epithelial -mesenchymal differentiation, necrotic zone, with myxoid degenerative



Figure 1: Right breast with deformation caused by a tumor

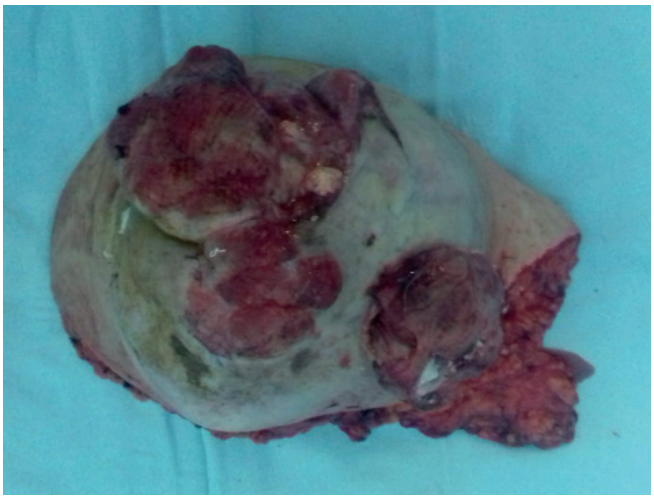


Figure 2: Right breast - simple mastectomy specimen

changes, a mild inflammatory infiltrate and light bleeding. The immunohistochemical analysis showed that tumorous cells were partly positive for vimentin, diffuse positive for SMA, and negative for p63 and p53. We concluded that it was a borderline phyllodes breast tumor. (Figure 3) The patient attends follow - up appointments and so far disease progression has not occurred.

DISCUSSION

Phyllodes tumors of the breast are a rare group of breast tumors that are typically large, fast-growing, and painless masses that stretch the overlying skin. (8) The peak incidence is between 40 and 50 years old, this is about 10 to 15 years later than fibroadenomas and 20 years earlier than most invasive ductal and lobular cancers. (3,9) The median size of phyllodes tumors are usually 4 cm though there has been reports of large tumor size up to 50 cm and these are mostly malignant. (10) The our patient had a 15cm large

phyllodes tumor and because of its size it was a giant breast tumor. Though ulceration and nipple retraction have been reported in some case reports, they remain uncommon; their presence indicates a malignant breast tumor. (11,12). In this case report, the patient had skin ulceration and a deformity of the nipple which made us believe it was a malignant breast tumor. Diagnosing phyllodes tumor includes ultrasound, mammography and additionally MRI and yet it is still difficult to differentiate between the two types of breast tumors - phyllodes tumors and fibroadenomas. (3) Our patient was believed to have a malignant phyllodes tumor because of the giant breast tumor mass with skin ulceration and the first ultrasound revealed a large mass occupying her whole right breast. The mammographic appearance of the left breast was normal. (BI-RADS 2) When there are indications of phyllodes tumor the diagnosis has to be made through core needle biopsy. This has only a sensitivity of 75% for differentiating phyllodes tumors from fibroadenomas so if clinical suspicion remains excisional biopsy is indicated for the correct differentiation. (3) Recurrence was observed in 21%, 46%, and 65% of patients with benign, borderline and malignant phyllodes tumor so some authors advocate simple mastectomy; (13) however, there are many studies showing no significant difference between breast conserving surgery and mastectomy taking into account overall survival and period without metastasis although the patients who underwent breast conserving surgery had higher recurrence rate. (14) Successful treatment of a phyllodes means that wide excision has to be used with intention of surgical margins of minimal 1 cm, but in some cases, like the one we present, partial mastectomy is necessary (15) - nevertheless the core biopsy revealed a benign tumor, it was the tumor size that defined the treatment method. Borderline and malignant phyllodes tumors rarely spread to the lymph nodes (<1% have pathological lymph nodes). (9, 16) Palpable axillary lymphadenopathy has been reported in up to 20% of cases but these are often reactive in nature. (17) Diagnostic procedures, as well as clinical examination of the patient, did not reveal lymphadenopathy so radical axillary dissection was not necessary; it was also taken into account that preoperative breast biopsy revealed a benign phyllodes tumor. Adjuvant chemotherapy and/or radiotherapy have not been proven to be useful in the treatment of phyllodes tumor (4,12) The patient was not recommended postoperative adjuvant therapy by the oncology consillium. She was recommended to attend follow-up appointments.

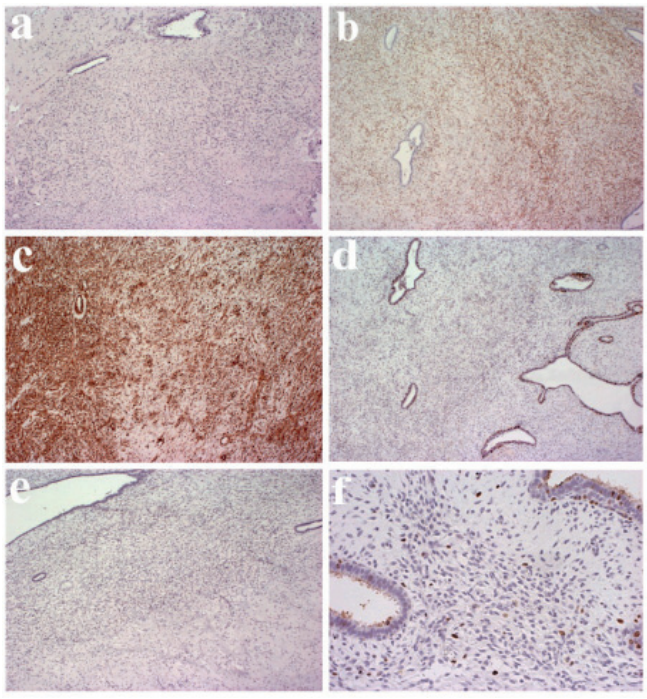


Figure 3: Borderline phyllodes tumor of breast - diagnosis was confirmed on routine H&E stained sections of the tumorous tissue (a) and immunohistochemical analysis (b-f). Tumorous cells were partly positive for vimentin (b), diffuse positive for SMA (c), and negative for p63 (e) and p53 (e). (original magnification, x100) Ki-67 proliferation index is low – 6% (f) (original magnification, x200)

CONCLUSION

Diagnosis and treatment of giant phyllodes tumors remain a great challenge for the surgeon. Establishing the preoperative diagnosis based on histopathological findings is imperative to disease management. Mastectomy has been the traditional procedure in treatment of giant phyllodes tumors; in cases where suspicious findings in the axilla are revealed, radical dissection should be performed. The prognosis for benign and borderline phyllodes tumors is very good. The patient with phyllodes tumors should not receive adjuvant therapy.

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