

Case Report

Border line Phyllodes Tumor and DCIS of the Breast

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Citation: Díaz GP, Morales RD, Velandia C, Parthe G (2018) Border line Phyllodes Tumor and DCIS of the Breast. J Surg: JSUR-1165. DOI: 10.29011/2575-9760.001165

Received Date: 28 August, 2018; **Accepted Date:** 28 September, 2018; **Published Date:** 04 October, 2018

Summary

Phyllodes tumors Represent <1% of all breast tumors and 2% of fibroepithelial neoplasms, the stromal component presents as a proliferation thereof Within the intraductal tissue mammary With an epithelial component That is Characterized by a proliferation of epithelial cells, Which can present in some cases changes of ductal hyperplasia, apocrine metaplasia changes and even squamous, in very rare cases can be changes atypical ductal hyperplasia Observed with, *in situ* carcinoma and invasive carcinoma. This is why we present a case of borderline phyllodes tumor of the breast associated with a component of ductal carcinoma *in situ* in a 61-year-old woman, WHO presented a voluminous lesion of the left breast with ulcerated areas in skin progressively growing. Needle biopsy of the lesion palpable tumor benign phyllodes Reported.

Keywords: DIN Carcinoma; Phyllodes

Introduction

The phyllodes tumor was first described as cystosarcoma Phyllodes in 1838 by Johannes year Muller, this tumor appearance of fish meat with 1.2 foliáceo pattern. Macroscopically are neoplasms which may vary between 1 to 20 cm and are observed as unencapsulated multinodular aspect or as a single mass well-defined lesions, are generally bulky firm consistency and may alternate with softened areas or mucoid material hemorrhagic foci 3 Four. Phyllodes tumors are rare tumors and less than 1% of all breast tumors and approximately 2% of fibro epithelial tumors. They are lesions that do not have a predisposition to race on average are observed in women over 40 years' age, with an average onset of 15 years later compared to the age of onset of fibroadenomas, although it should be considered to be occur at any age, rarely changes may occur to malignancy with atypical ductal hyperplasia, *in situ* carcinoma and even invasor^{1,5} carcinoma.

Clinical Case

It is female patient 61 years of age without medical or surgical significant history with V Gestas and V stop and menopause at age

50, that consultation with clinic 3-month history of tumor in the left breast of progressive growth, it is growing rapidly to ulcerated lesion periareolar location external to inferolateral (Figure 1) quadrants.



Figure 1: Patient 61 years left breast tumor ulcerated.

Breast ultrasound reported in left breast tumor greater than 14 cm, heterogeneous behavior with liquid areas and thickening of the skin with loss of continuity of the same level of external lower quadrant. Bilateral mammography, reports asymmetrical breasts with significant increase in size and density in left breast compromising its four quadrants, no calcifications (Figures 2,3) were observed)

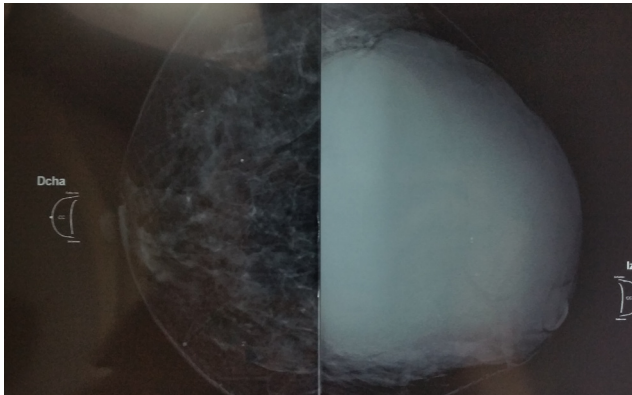


Figure 2: Mammogram patient in craniocaudal.

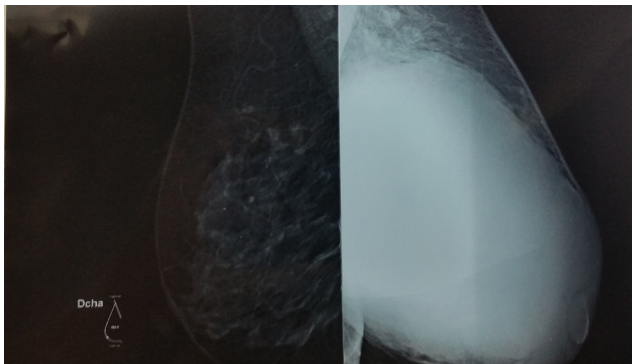
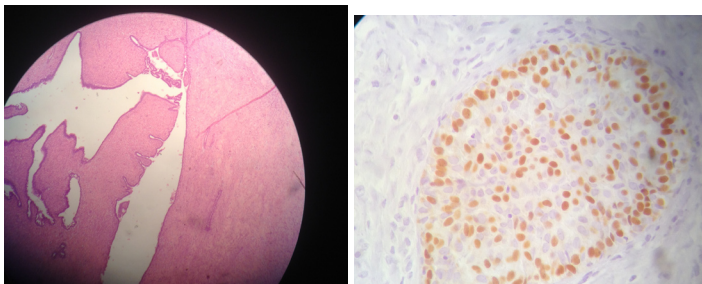


Figure 3: Mammogram patient in mediolateral oblique projection.

biopsy was performed with thick needle benign phyllodes tumor reported and planned, in view of the extent of the injury, for a simple total mastectomy. The definitive biopsy describes phyllodes tumor of intermediate grade of malignancy (borderline) with a tumor size of 19 x 11 x 3.5 cm, margins > 4 cm in the surgical specimen, marked hyperplasia with atypia in focal epithelial carcinoma foci component and DCIS low grade, with no evidence of metastases in the lymph nodes removed (Figure 4A). immunohistochemistry *in situ* component was performed reporting: estrogen receptor positive, progesterone receptor positive, negative and Ki67 Her2Neu 12% (Figure 4B).



Figures 4(A,B): A. Preparation histologically stained with hematoxylin and eosin 20X, moderately cellular stroma observed with tubular epithelial

elements. B. Immunohistochemistry duct filled by neoplastic cells that infiltrated no basement membrane, with positive nuclear reaction for estrogen receptors.

Discussion

Phyllodes tumor represents the less than 1% of breast tumors and 2% of fibroepithelial tumors. It has a sudden increase up to 30% of cases. It has a tendency to local relapse and in some cases develop metastatic disease when it is classified as malignant. In the microscopic appearance phyllodes tumors it is presented as a fibroepithelial injury which many authors originate from periductal stromal than interlobular, characterized by a pattern of intracanalicular growth projections in sheet form with a histologically heterogenous where the predominant expansion and increasing the cellularity of stromal component near the epithelial component, the latter component can make changes ductal hyperplasia, apocrine changes and even squamous metaplasia, and rarely can occur changes to malignancy with atypical ductal hyperplasia, carcinoma *in situ* and to invasor1 carcinoma. The current WHO classification of 2012, for phyllodes tumors classifies them as: benign, borderline (borderline) and malignant, according to the following histological parameters [1]. Stromal overgrowth: defined as the absence of epithelial elements in at least one microscopic field of low power and being more pronounced in malignant phyllodes [2]. Mitotic Index: presenting <5 mitoses per field in benign tumors, 5-9 mitosis in tumors borderline and > 10 mitosis in malignant [3]. the atypia and cellularity in the stromal cells are two more subjective elements may be present and evaluate mild, moderate or marked form according phyllodes tumor types and finally [4]. Tumor margins can be described circumscribing aspect benign or infiltrative lesions in malignas [1,4,5] lesions.

These tumors usually occur as a rapidly growing lesion and are unilateral lesions of hard consistency, alternating with unfixed deep structures remittent areas without compromising skin, although many times the overlying skin may become thinner and even necrotic causing ulcerations, is characteristic for the presence by collateral venous ectasia network of veins of the skin near the tumor. In the presence of an injury such study is imposed as ultrasound imaging, mammography or magnetic resonance imaging and histologic study. In young women, under 35 years, breast ultrasound is usually the first diagnostic tool, confirming a solid nodule, sometimes with heterogeneous areas polilobulado inside. On mammography, Surgery is the mainstay of treatment of breast phyllodes tumor, consisting lumpectomy or mastectomy depending on the size of tumor and breast tumor-related. Haagensen proposed that regardless of histology, removal of healthy tissue margin of 1 cm is a adecuado [6] treatment. Axillary dissection is not contemplated or malignant cases as hematogenous dissemination is basically, but can be felt axillary lymph up to 20%, but the presence of metastatic disease in them is less than

1% [7]. In cases of malignant phyllodes tumors, chemotherapy is not usually very effective results and radiotherapy is controversial results, being recommended in some centers. He phyllodes tumor shows significant variation in tumor size, larger tumors are more likely to be malignant, but evaluation of the biological behavior is based on the histological characteristics above. In our case despite the bulkiness of the lesion and the rate of growth, these factors determined as a phyllodes tumor of intermediate grade.

The appearance of a component of DCIS within a phyllodes tumor is a rare phenomenon and is not known the exact incidence, when it appears be treated both entities with independent oncological criteria for each disorder in our case we believe that the component phyllodes tumor treated with the simple total mastectomy with edges free resection neoplasias and greater margin

of 2 cm, with carcinoma component in addition to the surgery site, immunohistochemistry was performed, noting that the lesion has estrogen receptors and progesterone positive, indicating hormone therapy. Currently the patient is 10 months free of recurrence. Have been reported to date 37 cases of phyllodes tumors associated with a component of carcinoma, the average age and size of these cases was 50 years and 7 cm, respectively, in our case the patient age was 61 years and one lesion size 19cm, markedly higher than the average of the reported series. In 32 cases (86%) was a component of carcinoma *in situ*, similar to the histopathological description of the reported case. Treating our patient was the simple total mastectomy, consistent with the described mainly in the different series. The adjuvant was not described steadily, however the most commonly performed was radiotherapy and hormone therapy (Table 1).

AUTHOR	HISTOLOGY	AGE	Location	Surgery	adjuvant	Size
Seemayer 1975 [8]	P. Maligno CDIS	27	ipsilateral	MTS	NR	6 cm
Leong 1980 [9]	Benigno P. CLIS	49	ipsilateral	MPO	NR	6 cm
Cole-Beuglet 1983 [10]	Benigno P. LCIS DCIS +	55	ipsilateral	MPO	NR	3.5 cm
IshidaT, 1984 [11]	P. malignant DCIS	NR	ipsilateral	MTS	NR	NR
Huntrakoon M, 1984 [12]	P. malignant DCIS	NR	ipsilateral	MTS	NR	NR
Grove 1986 [13]	P. benigno CDIS	71	ipsilateral	MRMM	NR	19 cm
Ward 1986 [14]	P. benigno CDIS	55	ipsilateral	MTS	NR	4 cm
Knudsen 1987 [15]	P. benign LCIS DCIS +	71	ipsilateral	MRMM	NR	7 cm
Rosa 1989 [16]	P. benign CDIS	77	ipsilateral	MRMM	NR	5 cm
Brochard-Le-Douarin, 1989 [17]	P. benigno CLIS	NR	ipsilateral	NR	NR	NR
Schwickerath 1992 [18]	P. malignant DCIS	47	ipsilateral	MRMM	NR	2 cm
Padmanabhan 1997 [19]	P. malignant DCIS	47	ipsilateral	MRMM	NR	7.5 cm
Naresh 1997 [20]	P. borderline CDIS	51	ipsilateral	MPO	NR	14 cm
Nishimura 1998 [21]	P. maligno CDIS	80	ipsilateral	MPO	NR	10.5 cm
Villanueva 1999 [22]	P. maligno CLIS	nr	Bilateral	MTS	NR	NR
Alo 2001 [23]	P. maligno CDIS	39	ipsilateral	MTS	NR	9 cm
Parfit 2004 [24]	P. benign DCIS + CDI	26	ipsilateral	MPO + DA	Hor + Rt + qt	3.3 cm
Lin 2005 [25]	P. maligno CDIS	Four. Five	ipsilateral	MTS	NR	12 cm
Nomura 2006 [26]	P. malignant DCIS	75	ipsilateral	MTS	NR	3.5 cm
Yamaguchi 2008 [27]	P. benign CDIS	54	ipsilateral	MTS	NR	15 cm
Trabelsi 2010 [28]	P. borderline tubular Ca + DCIS	53	ipsilateral	MTS DA	Do not	15 cm
Yoshimori 2011 [29]	P. benign CDIS	53	ipsilateral	MPO	Rt	3.5 cm

Sean 2011 [30]	P. borderline CDIS	53	ipsilateral	MPO	Rt	6,5 cm
Guerino 2012 [31]	P. benign CDI	66	contralateral	MTS + MRMM	Rt + QT	9 cm
Shin 2013 [32]	P. benign CDIS	Four. Five	ipsilateral	MPO	NR	1.8 cm
Colakogulu 2014 [33]	P. benign CDIS	19	ipsilateral	MPO	Hor Rt +	1.8 cm
Chopra 2016 [34]	P. benign CDIS	2. 3	ipsilateral	MPO	NR	5 cm
Castillo 2016 [35]	P. benign CDIS	44	Bilateral	MTS	Do not	9 cm
	Benign CL P.	48	ipsilateral	MTS + DA	Hor Rt +	18 cm
Panko 2017 [36]	P. benign CDIS	70	ipsilateral	MPO	Hor Rt +	2.3 cm
Michael 2017 [37]	P. bordeline CDIS	54	ipsilateral	MTS	Do not	9 cm
	P. malignant DCIS	52	ipsilateral	MTS	Do not	10 cm
	P. malignant DCIS	48	ipsilateral	MTS	Do not	5 cm
	P. benign CDIS	44	ipsilateral	MTS	Do not	5 cm
	P. benign CDIS	25	ipsilateral	MPO	Rt	2.5 cm
	P. malignant CDI	Four. Five	ipsilateral	MRMM	Qt + Hor	4 cm

P: Phyllodes, DCIS: ductal carcinoma *in situ*, LCIS: LCIS, CDI: invasive ductal carcinoma, MTS: total mastectomy simple, MPO: lumpectomy oncological, MRMM: modified radical mastectomy madden type DA: axillary dissection, NR: not reported, Rt: radiotherapy, Qt: chemotherapy, Hor: hormone therapy.

Table 1: Characteristics of reported cases with phyllodes tumor associated with a carcinoma component.

Conclusion

We can conclude that, although the association of phyllodes tumor and *in situ* carcinoma is a rare association, should always be considered in the histopathological reports, since the therapeutic approach and prognosis of this type of patient varies, forcing us to develop new strategies oncologic control.

References

- Lopez C (2018) phyllodes tumors of the breast pathological aspects. P Caracas 4-6.
- Fiks A (1981) Cystosarcoma phyllodes of yhe Mamary gland - Muller tumor. Virchows Arch a Pathol Anat Histol 392: 1-6.
- Azzopardi JG, Ahmed A, Millis RR (1979) Problems In breast pathology. Major Probl Pathol 11: 1-466.
- Hernandez G, Gomez R (2012) Paredes Benign lesions of the Breast. Editorial Médica Panamericana 217-222.
- Zhang Y, Kleer CG (2016) Phyllodes Tumor of the Breast: Histopathologic Features, Differential Diagnosis, and Molecular/Genetic Updates. Arch Pathol Lab Med 140: 665-671.
- Haagensen CD (1987) Breast diseases. Buenos Aires: Editorial Bibliografica Argentina 271-297.
- Pinero A, Garcia PL, Moreno JI (2002) phyllodes tumor malignant, unilateral and multicentric breast. Cir Esp 71: 327.
- Seemayer TA, Tremblay G, Shibata H (1975) The unique association of mammary stromal sarcoma with intraductal carcinoma. Cancer 36: 599-605.
- Leong AS, Meredith DJ (1980) Tubular carcinoma developing within a recurring cystosarcoma phyllodes of the breast. Cancer 46: 1863-1867.
- Cole-Beuglet C, Soriano R, AB Kurtz, Meyer JE, Kopans DB, et al. (1983) Ultrasound, X-ray mammography, and histopathology of phylloides cystosarcoma. Radiology 146: 481-486.
- Ishida T, Izuo M, Kawai T (1984) Breast carcinosarcoma cystosarcoma phyllodes Arising in: report of a case with a review of the literature. Jpn J Clin Oncol 14: 99-106.
- Huntrakoon M (1984) Malignant phyllodes Cystosarcoma with simultaneous carcinoma in the ipsilateral breast. South Med J 77: 1176-1178.
- Grove A, Deibjerg Kristensen L (1986) Intraductal carcinoma tumor phyllodes Within a of the breast: a case report. Tumori 72: 187-190.
- Ward RM, Evans HL (1986) Cystosarcoma phyllodes. A clinicopathologic study of 26 Cases. Cancer 58: 2282-2289.
- Knudsen PJ, Ostergaard J (1987) Cystosarcoma lobular and ductal with phylloides carcinoma *in situ*. Arch Pathol Lab Med 111: 873-875.
- Rosa G, Ferrara G, Goglia P, Ghicas C, Zeppa P (1989) Carcinoma *in situ* and microinvasive With squamoid differentiation Arising in a phylloides tumor: report of a case. Tumori 75: 514-517.

17. Brochard-Le-Douarin LA, Laboisie C, Potet F, Seneze J (1989) Phyllodes tumor associated with lobular carcinoma *in situ*. Rev Fr Gynecol Obstet 84: 41-43.
18. Schwickerath J, Blessing MH, Wolff E (1992) Seltene Erscheinungsform eines aus Kombinationstumors Cystosarcoma phylloides malignum und eines intraduktalen Karzinoms. Geburtsh u Frauenheilk 52: 557-559.
19. Padmanabhan V, Dahlstrom JE, Chong GC, Bennett G (1997) Phyllodes tumor lobular with carcinoma *in situ* and liposarcomatous stroma. Pathology 29: 224-226.
20. Deodhar KK, Baraniya JB, Naresh KN, Shinde SR, Chinoy RF (1997) Cancerization of phyllodes tumor. Histopathology 30: 98-99.
21. Nishimura R, Hasebe T, Imoto S, Mukai K (1998) Malignant phyllodes tumor with a noninvasive ductal carcinoma component. Virchows Arch 432: 89-93.
22. Villanueva MJ, Navarro F, Sanchez A, Provencio M (1999) cystosarcoma phylloides Coexistence of breast and lobular carcinoma *in situ* bilateral. Rev Clin Esp 199: 776.
23. Alo PL, Andreano T, Monaco S, et al. (2001) Tumore malignante filloide della mammella with aspetti di intraduttale carcinoma. Pathologica 93.
24. Parfit J, Armstrong C, Malley F, Ross J, Tuck A (2004) *In situ* and invasive carcinoma phyllodes tumor associated Within a lymph node With metastase. World Journal of Surgical Oncology 15 : 1-4.
25. Lim M, Tan PH (2005) DCIS phyllodes tumor Within: a rare occurrence. Pathology 37: 393-396.
26. Nomura M, Inoue Y, Fujita S, Sakao J, Hirota M, et al. (2006) A case of non-invasive ductal carcinoma Arising in malignant phyllodes tumor. Breast Cancer 13: 89-94.
27. Yamaguchi R, Tanaka M, Kishimoto Y, Ohkuma K, Ishida M, et al. (2008) DCIS Arising in a phyllodes benign tumor: report of a case. Surg Today 38: 42-45.
28. Trabelsi A, Adelkrim S, Stita W, Boudaga Z, Hammedi F, et al. (2010) Carcinoma *in situ* and invasive phyllodes tumor Within a borderline. World J Oncol 42-44.
29. Yoshinori N, Iguchi C, Tsuboi K, Maruyama R (2011) DCIS Arising Within a benign phyllodes tumor: a case report with a review of the literature. Lett Oncol 2: 223-228.
30. Quinlan-Davidson S, Hodgson N, Elavathil L, Shangguo T (2011) Borderline phyllodes tumor with an incidental invasive tubular carcinoma and lobular carcinoma *in situ* component: a case report. J Breast Cancer 14: 237-240.
31. Guerino B, Rossetti C, Souza N, Fonseca F, Azzalis LA, et al. (2012) Coexistence of benign phyllodes tumor and invasive ductal carcinoma in distinct breasts: case report. Eur Jour Med Research 1-4.
32. Shin DJ, Kim DB, Roh JH, Kwak BS (2013) DCIS Arising in a phyllodes benign tumor. J Korean Radiol Soc 68: 423-426.
33. Çolakoglu MK, Yenidoğan E, Akgül GG, Irkkan SC, Özdemir Y, et al. (2014) Ductal carcinoma *in situ* in benign phyllodes Arising in 19-year-old patient tumor: a case report. J Breast Health 10: 239-241.
34. Chopra S, Muralikrishnan V, Brotton J (2016) Youngest care of DCIS Arising Within a phyllodes tumor benign: a termination report. IJSCR 2016: 67-69.
35. Castillo R, Muñoz V, Saldivia F (2016) Phyllodes tumor carcinoma associated report of two cases and review of the literature. Rev Venez Oncol 28: 179-180.
36. Panko N, Jebran A, Gomberrialla A, Connolly M (2017) Invasive Ductal Carcinoma within a Benign Phyllodes Tumor. Am J Case Rep 18: 813-816.
37. Co M, Tse GM, Chen C, Wei J, Kwong A (2018) Coexistence of Ductal Carcinoma Within Mammary Phyllodes Tumor: A Review of 557 Cases from a 20-year Region-wide Database in Hong Kong and Southern China. Clin Breast Cancer 18: 421-425.