ORIGINAL RESEARCH PAPER

A CASE OF BREAST MYOFIBROBLASTOMA - A RARE DIAGNOSIS ON HISTOPATHOLOGY.

KEY WORDS: Breast, Myofibroblastoma, Tumor of

Pathology

_		,	 -
r	nammary	stroma.	

Dr. Mitalkumari Baria		Third Year Resident Pathology.		
Dr.	Nisha Raval	$\label{eq:professor} Professor, Department Of Pathology, CUSMC, Surendranagar.$		
RACT	INTRODUCTION: Myofibroblastoma is a benign mesenchymal tumor originally described in the male breast but also occurring in the female breast. CASE REPORT: A 15 years old male present in surgery department with complain of left breast lump since 10 days. It was non tender and mobile. USG: Subcutaneous swelling. FNAC: fibrofatty tissue			

DISCUSSION: Myofibroblastoma is a benign mesenchymal tumor originally described in the male breast but also

INTRODUCTION:

ABST

 Myofibroblastoma is the term used for a benign stromal neoplasm composed of myofibroblast and collagen first described by Toker et al. Myofibroblastoma is a benign mesenchymal tumor originally described in the male breast but also occurring in the female breast. Focally, there may be smooth muscle, cartilaginous or adipose metaplasia. The appearance is very reminiscent of both solitary fibrous tumor and spindle cell lipoma, the suggestion having been made that there is close histogenetic link between these neoplasms.

occurring in the female breast.

CASE HISTORY:

 A 15 years old male present in surgery department with complain of left breast lump since 10 days. It was non tender and mobile. In USG, it was diagnosed as subcutaneous swelling. In FNAC, it was diagnosed as fibrofatty tissue. Chest X-ray was normal.

GROSS EXAMINATION:

 A 4x3x2.5cm sized tissue specimen is received. Outer surface is greyish brown and irregular. On cut section, it shows whitish, homogenous area and few yellowish area.



MICROSCOPIC EXAMINATION:

 H & E stained section shows proliferation of spindle cells show tapering end, abundant eosinophilic cytoplasm and plump nucleus with vesicular chromatin and prominent nucleoli. At places, spindle cells show infiltration into surrounding adipocytes. Spindle cells are intervened by collagen fibers.

Findings are suggestive of "BENIGN TUMOR OF BREAST - MYOFIBROBLASTOMA".



Low power view

High power view

DISCUSSION:

 Myofibroblastoma is a benign mesenchymal tumor originally described in male breast but also occurring in the female breast. Grossly, it is well circumscribed and usually small, although on occasion it can reach a large size. Microscopically, uniform, bland-looking spindle

www.worldwidejournals.com

cells are arranged in short fascicles separated by broad bands of hyalinized collagen. Myofibroblastoma can show different variant using histological patterns. Variants identified included classic, cellular, collagenous/fibrous, lipomatous, infiltrative, myxoid, epithelioid and decidualike variants. The principal differential diagnosis includes tumor that arise primarily in the breast parenchyma such as leiomyoma, spindle cell lipoma, solitary fibrous tumor, spindle cell sarcoma, nodular fasciitis, desmoid-type fibromatosis, angiomyolipomas, pseudoangiomatous stroma hyperplasia. Epithelioid type of myofibroblastoma can be confused with invasive lobular carcinoma due to pseudo-infiltrative growth pattern and the expression of ER and PR. AS the name implies, the epithelioid variant is composed of exclusively or predominantly, by cells with epithelioid morphology. It is rare subtype. In desmoidtype of fibromatosis, long sweeping fascicles with elongated, slender, spindled cells of uniform appearance and pale cytoplasm set in a collagenous stroma seen. No nuclear hyperchromasia, minimal cytologic atypia and variable mitotic rate. In nodular fasciitis, loose storiform proliferation of bland spindle cells, mitosis may be present and conspicuous, scattered inflammatory cells (lymphocytes and histiocytes) present and may spontaneously regress.

CONCLUSION:

 Myofibroblastoma is a well capsulated tumor with good prognosis, which usually allows easy surgical excision.
 Surgery is recommended treatment and , as long as the resection margins are free, relapse is unlikely.
 Additionally, malignant transformation has not been reported yet.

REFERENCE:

- Abeywardana M.S., Abeysekara, Priyantha Siriwardana H.P., Abbas K.F., Tanner P., Ojo A.A. An unusally large myofibroblastoma in a male breast: a case report. J Med Case Rep. 2008;2:157. [PMC free article] [PubMed] [Google Scholar].
- McMenamin M.E., Fletcher C.D.M. Mammary myofibroblastoma type of soft tissue. A tumor closely related to spindle cell lipoma. Am J Surg Pathol. 2001;25(8):1022–1029. [PubMed] [Google Scholar].
- Fihlo J.S.R., Nercolini Faoro L., Gasparetto E.L., Takashi Totsugui J., Schmitt F.C. Mammary epithelioid myofibroblastoma arising in bilateral gynecomastia: case report with Immunohistochemical profile. Int J Surg Pathol. 2001;9:331. [PubMed] [Google Scholar].
- Magro G., Michal M., Bisceglia M.Benign spindle cell tumors of the mammary stroma: diagnostic criteria, classification, and histogenesis. Pathol Res Pract. 2001;197:453-466. doi:0344-0338/01/197/7-453\$15.00/0. [PubMed] [Google Scholar].
- Magro G., Amico P., Gurrera A. Mixoid myofibroblastoma of the breast with atypical cells. a potential diagnostic pitfall. Virchows Arch. 2007;450:483–485. [PubMed] [Google Scholar].
- El Aouni N., Laurent I., Terrier P., Mansouri D., Suciu V., Delaloge S. Granular cell tumor of the breast. Diag Cytopathol. 2007;35(11):725–727. [PubMed] [Google Scholar].
- Wagortz E.S., Weiss S.W., Norris H.J. Myofibroblastoma of the breast: sixteen cases of a distinctive benign mesenchymal tumor. Am J Surg Pathol. 1987;11:493–502. PubMedI [Goord Scholar].
- 8. Tavassoli F.A., Devilee P. IARC Press; Lyon: 2003. WHO classification of tumors

PARIPEX - INDIAN JOURNAL OF RESEARCH | Volume - 12 | Issue - 05 | May - 2023 | PRINT ISSN No. 2250 - 1991 | DOI : 10.36106/paripex

Pathology and genetics of tumors of the breast and female genital body. [GoogleScholar].

- [GoogleScholar].
 Fischer C. Myofibroblasic malignancies. Adv Anat Pathol. 2004;11(4):190-201. [PubMed] [GoogleScholar].
 8. Tavassoli F.A., Devilee P. IARC Press; Lyon: 2003. WHO classification of tumors. Pathology and genetics of tumors of the breast and female genital
- body.[GoogleScholar]. 9. Fischer C. Myofibroblasic malignancies. Adv Anat Pathol. 2004;11(4):190-201. [PubMed] [Google Scholar].
 10. Meguerditchian A.N., Malik D.A., Hicks D.G., Kulkarni S. Solitary fibrous
- tumor of the breast and mammary myofibroblastoma: the same lesion? Breast
- J.2008;14(3):287–292. [PubMed] [Google Scholar]. 13. 11. Magro G., Bisceglia M., Michal M. Expression of steroid hormone receptors, their regulated proteins, and bcl-2 protein in myofibroblastoma of $the breast. Histopathology. 2000; 36:515-521. [PubMed] \ [Google Scholar].$