IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 18, Issue 11 Ser.7 (November. 2019), PP 26-28
www.iosrjournals.org

Fibromyxoma of Inguinal Region – A Rare Case

Dr.Ramesh Kumar Korumilli[1], Dr.Muvva Sri Harsha[2],
Dr.Sameer Kumar Reddy[3], Dr.Amulya Reddy K[4]
[1]*Professor of General Surgery,Dept.of General Surgery,SVS Medical College and Hospital,Mahbubnagar*
[2]*Postgraduate in General Surgery,Dept.of General Surgery,SVS Medical College and Hospital,Mahbubnagar*
[3]*Postgraduate in General Surgery,Dept.of General Surgery,SVS Medical College and Hospital,Mahbubnagar*
[4]*Postgraduate in General Surgery,Dept.of General Surgery,SVS Medical College and Hospital,Mahbubnagar*

Abstract: *A 60-year-old man presented with a slow-growing, painless, subcutaneous lesion in the right inguinal region. The mass was 20.0 cm × 10.5 cm × 5.0 cm in size, well circumscribed, mobile, and rubbery.Microscopically, the resected mass was mainly composed by a proliferation of small spindle or stellate cells, variablyadmixed with mature adipose tissue, embedded within an abundant myxoid and collagenized stroma.Immunohistochemically, the spindle and stellate cells were strongly positive for vimentin, CD34, and bcl-2antibodies but not for smooth muscle actin and desmin. The tumor was diagnosed as fibromyxomabased on the typical findings of histology and immunohistochemistry. This is probably the first case to be reported in literature for a fibromyxoma in inguinal region.*

Keywords: *Fibromyxoma, Inguinal region, rare case, immunohistochemistry*

Date of Submission: 02-11-2019 Date of Acceptance: 18-11-2019

I. Introduction

Fibromyxolipomais a rare benign soft tissue lesion that most commonly arises in the subcutis or muscular fascia of the head and neck, shoulders, calf, foot, or back in adult male patients. The characteristichistologic picture is described as an admixture of mature adipose tissue, spindle and stellate cells, and abundantmyxoid stroma with prominent collagenization. These neoplasms typically show positive immunoreactivity forcd-34, bcl-2 and Vimentin.

II. Case Report

A 60-year-old man was first seen by us 3 years after becoming aware of a painless subcutaneous mass in his right inguinal region. The swelling was initially small in size and gradually progressed to the current size.The mass is irreducible and doest not become more prominent coughing or straining. He did not have any associated constitutional symptoms.

On physical examination, a single well definied20 cm× 10 cm × 7 cm size mass was in subcutaneous plane on right inguinal region just above the inguinal ligament, mobile, firm in consistency and irreducible.

Ultrasonography (US) revealed a well circumscribed, inhomogeneous mass with prominent vascularity, measuring about 19.7 cm × 9.2 cm × 6.8 cm, in the right inguinal region. Firstly, it was clinically considered to be soft tissue swelling in subcutaneous plane probably lipoma. Ultrasonography suggested a well homogenous mass with well rounded margins in subcutaneous plane lying over external oblique aponeurosis. FNAC suggested lipoma. Excision and biopy was done.

Macroscopically, the excisedtumor was 24.0 × 10.5 × 5.0 cm in size, soft and well-circumscribed by a thin fibrous capsule. The cut surfacewas yellow-gray and mucoid. Histologically, the tumorswas mainly composed by a proliferation ofSmall spindle or stellate cells variably admixed with mature adipose tissue embedded within an abundant myxoid and collagenized stroma. The spindle cells had a small hyperchromatic nuclei in which pleomorphism, atypia, or mitotic activity were extremely rare.Immunohistochemical staining revealed that the spindle and stellate cells stained strongly positive for vimentin, CD34, and bcl-2 antibodies, Stains for smooth muscle actin and desmin were negative. The patient's postoperative period was uneventful.


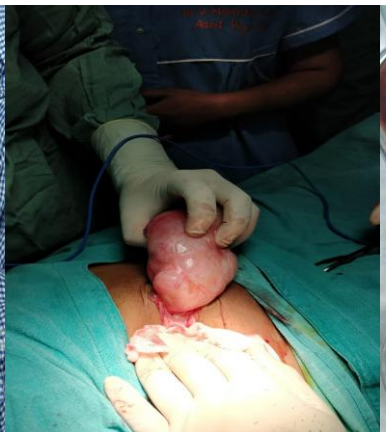
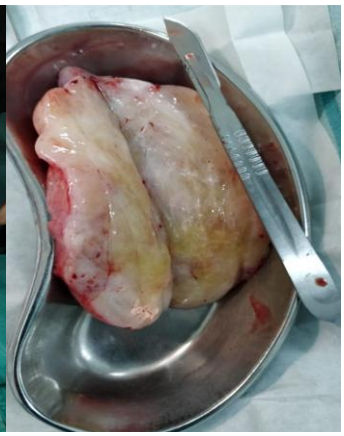

Fig 1 – Pre-operative picture **Fig 2 –** Intraoperative picture **Fig3 –** GrossCutsection

III. Discussion

Fibromyxoma is an uncommon benign soft tissue tumor that first reported by Suster et al. In 1998 in Twelve patients [1]. The mass more commonly arises in the subcutaneous tissue of subcutis or muscular fascia of the head and neck, shoulders, chest wall or back, and predominantly affects male adults. Clinical Follow-up in all available cases showed no evidence of recurrence or metastasis after surgical treatment [2-4].

The most striking histologic feature of Fibromyxomais an admixture of mature adipose tissue, spindle and stellate cells, and abundant myxoid stroma with prominent collagenization. Immunohistochemically, the vimentin and CD34 immunohistochemical stains accentuated the cell's dendritic nature by revealing slender, complex cytoplasmic Prolongations which are the main reason of it'sname[1].

The curative treatment for Fibromyxoma is completelyLocal excision. Recurrence or metastasis has never been reported in Fibromyxoma patients after surgical treatment.Fibromyxoma should be differentiated from some benign lesions: spindle cell lipoma (SCL), solitary fibrous tumor(SFT), lipoblastoma, lipoblastomatosis, and nodular fascitis. Of the other tumor-like lesions, SCL is most likely to be confused with Fibromyxoma. SCL is composed of a mixture of mature adipocytes and uniform spindle cells within a matrix of mucinous material traversed by a varying number of birefringent collagen fibers. It shares many features with Fibromyxoma including age, male predilection, location, gross features. The signally similar clinical and histological feature of the lesions makes it difficult for distinguishing Fibromyxoma from SCL [5]. Suster et al. Emphasized the dendritic nature of the spindle cells, the plexiform vascular pattern, and the abundance of keloidal collagen as the three essential features in Fibromyxoma, which were not commonly presented in SCL[1].

But recently studies revealed that some features, such as prominent vascular patterns, and short bipolar cytoplasmic extensions, also had been seen in SCL[2]. Other benign spindle cell tumor that should be distinguished from Fibromyxoma is solitary fibrous tumor (SFT). SFTs which have a predilection for the thoracic cavity are rare fibrous neoplasms. Histologically, the tumor is characterized by a "patternless pattern" of short spindle cells with scant cytoplasm and bland cytologic appearance separated by strands of rope-like collagen, and a "hemangiopericytomalike" pattern where the lesional cells are densest around small and medium ectatic and branching vessels [6]. The "hemangiopericytoma-like" vascular pattern and the lack of an adipose tissue component are two histologically features for distinguishing SFT from Fibromyxoma[2]. Lipoblastoma and lipoblastomatosis are another two rare benign soft tissue mesenchymal tumours that may be confused with Fibromyxoma. The tumours mainly occur almost exclusively in infants and children under the age of 3 years. The common microscopic features of lipoblastoma and lipoblastomatosis have been described as a mixture composed of immature lipoblasts,mature lipocytes,embedded in an abundant myxoid stroma. Fibromyxoma could be easily distinguished from lipoblastoma and lipoblastomatosis by the patients age and the absence of lipoblasts [1,7]. Nodular fascitis is another lesion that should be differentiated from Fibromyxoma. Nodular fascitis shows proliferating spindle cells embedded in a loosely textured myxoid and inflammatory stroma. UnlikeFibromyxoma, the lesion is relatively well circumscribed but poor encapsulated. Immunohistochemically, the spindle cells are positive for muscle markers except desmin and are S-100 protein and CD-34 negative [8]

IV. Conclusion

Fibromyxoma is very rare benign tumor. We report the case of fibromyxoma in the right inguinal region which is not mentioned anywhere in literature till now. It is very common especially in inguinal region to confuse soft swellings with irregducible hernia. A diagnosis of Fibromyxomashould be made by their microscopical and immunohistochemicalFeatures. Fibromyxomashould be considered in the differenial diagnosis of lesions with spindle cell lipoma,solitary fibrous tumor, lipoblastoma, lipoblastomatosis, nodular fasciitis, and myxoidliposarcoma.

References

[1]. Suster S, Fisher C, Moran CA: Dendritic fibromyxolipoma:clinicopathological study of adistinctive benign soft tissue lesion that
[2]. May be mistaken for a sarcoma. Ann Diagnostic Pathol 1998, 2:111–120.
[3]. Karim RZ, mccarthySW, Palmer AA, Bonar SF, Scolyer RA: Intramusculardendritic fibromyxolipoma: myxoid variant of spindle cell lipoma? PatholInt 2003, 53:252–258.
[4]. Dahlin LB, Ljungberg O: Dendritic fibromyxolipoma adherent to themedian nerve in the foream. J PlastSurg Hand Surg 2012, 46:120–123.
[5]. Al-Maskery AY, Al-Sidairy SM, Al-Hamadani AS: Dendritic Myxofibrolipoma:often misdiagnosed as sarcoma. Craniomaxillofac trauma Reconstr 2011,4:171–174.
[6]. Fletcher CDM, Martin-Bates E: Spindle cell lipoma: a clinicopathologicalstudy with some originalobservations. Histopathology 1987, 11:803–817.
[7]. Suster S, Nascimento AG, Miettinen M, Sickel JZ, Moran CA: Solitary fibroustumors of softtissue. A clinicopathologic and immunohistochemicalstudy of 12 cases. Am J SurgPathol 1995, 19:1257–1266.
[8]. Bourelle S, Viehweger E, Launay F, Quilichini B, Bouvier C, Hagemeijer A, Jouve JL, Bollini G: lipoblastoma and lipoblastomatosis. J PediatrOrthop B 2006, 15:356–361.
[9]. Squillaci S, Tallarigo F, Patarino R, Bisceglia M: Nodular fasciitis of the male breast: a case report. Int J SurgPathol 2007, 15:69–72.
[10]. Kilpatrick SE, Doyon J, Choong PF, Sim FH, Nascimento AG: The clinicopathologic spectrum of myxoid and round cell liposarcoma. A
[11]. Study of 95 cases. Cancer 1996, 77:1450–1458.
[12]. Powers MP, Wang WL, Hernandez VS, Patel KS, Lev DC, Lazar AJ, López-Terrada DH: Detection of myxoidliposarcoma-associated FUS–DDIT3 rearrangement variants including a newly identified breakpoint using an optimized RT-PCR assay. Mod Pathol 2010, 23:1307–1315.
[13]. Narendra S, Valente A, Tull J, Zhang S: DDIT3 gene break-apart as a molecular marker for diagnosis of myxoidliposarcoma--assay validation and clinical experience. DiagnMolpathol 2011, 20:218–224.
[14]. Hill DA, Dehner LP, Gow KW, Pappo AS, Crawford D, Pflaumer SM, Furma WL, Hayes-Jordan AA, mcdermott MB: Perianal Rhabdomyosarcoma Presenting as a Perirectal Abscess: A Report of 11 Cases. J PediatrSurg 2002, 37:576–581.
[15]. Hatanaka K, Tanimoto A, Umekita Y, Yoshioka T, Kanekura T: Unusual anogenital apocrine tumor resembling mammary-like gland adenoma in male perineum: a case report. DiagnPathol 2010, 5:42.
[16]. Behranwala KA, Clark MA, Thomas JM: Soft-tissue tumours of the perineum. Eur J SurgOncol 2002, 28:437–442.
[17]. Grobmyer SR, Clary B, Lewis JJ, Delgado R, Woodruff JM, Brennan MF: Adult Perineal Sarcomas. J SurgOncol 2001, 77:101–104.

Dr.Ramesh Kumar Korumilli. "Fibromyxoma of Inguinal Region – A Rare Case". IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 18, no. 11, 2019, pp 26-28.