

Angioleiomyoma of Scrotal Wall- A Rare Case Presentation.

Dr.A.Keerthy Aberna¹, Prof.Dr.Bharathi Vidhya Jayanthi²

Dr.G.Veeraraghavan³

¹(Post Graduate, Institute Of Pathology ,Madras. Medical College .Chennai.India).

²(Director, Institute Of Pathology .Madras Medical College .Chennai.India)

³(Post Graduate, Institute Of Pathology ,Madras. Medical College .Chennai.India)

Corresponding author: Prof . Dr.Bharathi Vidhya Jayanthi.

Abstract: Background : Angioleiomyoma Of The Scrotum Is A Rare Benign Lesion. As It Is A Rare Entity ,It Is Considered In The Differential Diagnosis Of Paratesticular Malignant Tumors. We Present Here A Case Report Of Angioleiomyoma Arising From The Scrotal Wall .

Case Report: A 58 Years Old Male Presented With Scrotal Swelling For 10 Years And Pain For Past 6 Months.High Frequency Ultrasound Of The Scrotum Shows 3 X2 Cm Heterogenous Solid Mass Arising From The Scrotal Wall. Both Physical Examination And Ultrasound Revealed The Mass As Sebaceous Cyst And Excision Biopsy Of The Mass Was Done.Histopathological Examination Revealed The Diagnosis Of Angioleiomyoma Of Scrotal Wall Which Was Confirmed By Immunohistochemistry.

Conclusion: Although It Is A Benign Lesion , It Can Mimic Malignancy In View Of The Solid Component In Ultrasonography .However Definitive Diagnosis Is Established By The Pathologist

Keywords : -Painful Scrotal Swelling ,Angioleiomyoma Of Scrotum , Paratesticular Malignant Tumors

Date of Submission: 26-03-2018

Date of acceptance: 09-04-2018

I. Introduction:

Angioleiomyoma Of The Scrotum Is A Rare Benign Lesion.Smooth Muscle Hyperplasia, Leiomyoma, Leiomyomatous Hamartoma Are Synonyms Used In The Literature(1).Being The Rare Entity,It Should Be Considered In The Differential Diagnosis Of Paratesticular Malignant Tumors .Any Solid Mass Present In The Scrotum Is Considered As Malignant Until Otherwise Proven.To Distinguish It From Malignancy, Long Term History And Tumor Markers Should Be Kept In Mind For Initial Diagnosis (2). We Present Here A Case Report Of Angioleiomyoma Arising From The Scrotal Wall .

II. Case Report:

58 Years Old Male Presented With Painful Scrotal Mass. The Medical History Revealed That He Had Swelling In The Scrotum For 10 Years. Pain Had Emerged 6 Months Before Presentation.Physical Examination Revealed 2x2 Cm Firm Swelling In The Scrotal Skin. Both Testis Was Found To Be Free.High Frequency Ultrasound Of The Scrotum Shows 3 X2 Cm Heterogenous Solid Mass Arising From The Scrotal Wall. Both Physical Examination And Ultrasound Revealed The Mass As Sebaceous Cyst And Excision Biopsy Of The Mass Was Done.

2.1 Gross : We Received A Skin Attached Soft Tissue Mass Measuring 2x2x1 Cm. External Surface-Normal.Cut Surface Shows Grey White Mass With Whorled Appearances(Fig 1 And 2)



Fig: 1: Skin Attached Soft Tissue Mass



Fig:2: Cut Surface Shows A Grey White Mass With Whorled Appearance.

2.2 Microscopic Features:

Histopathology Showed Skin With Underlying Circumscribed Benign Neoplasm Arranged In Bundles And Interlacing Fascicles Composed Of Spindle Shaped Cells With Moderate Eosinophilic Cytoplasm And Elongated Nuclei. Stroma Shows Dilated And Congested Vessels. (Fig : 3 To 7)

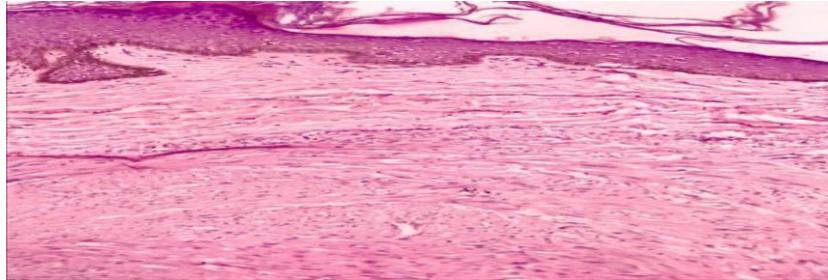


Fig 3: Skin With Underlying Neoplasm .H & E : 40 X

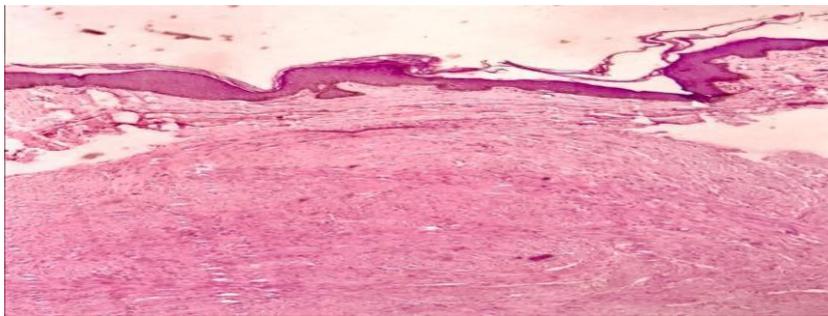


Fig 4: Skin With Underlying Neoplasm .H & E : 40 X

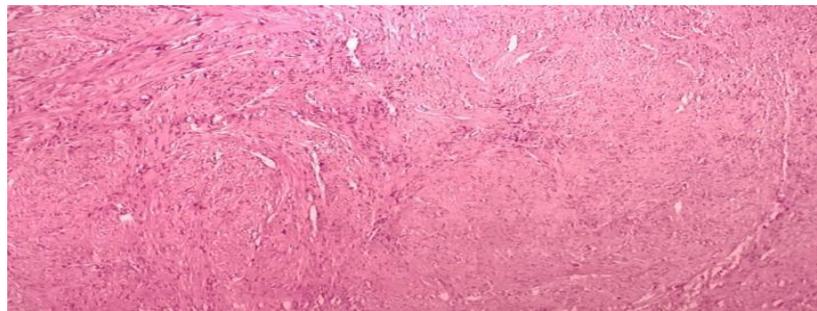


Fig 5: Neoplasm Arranged In Interlacing Bundles H& E 100x

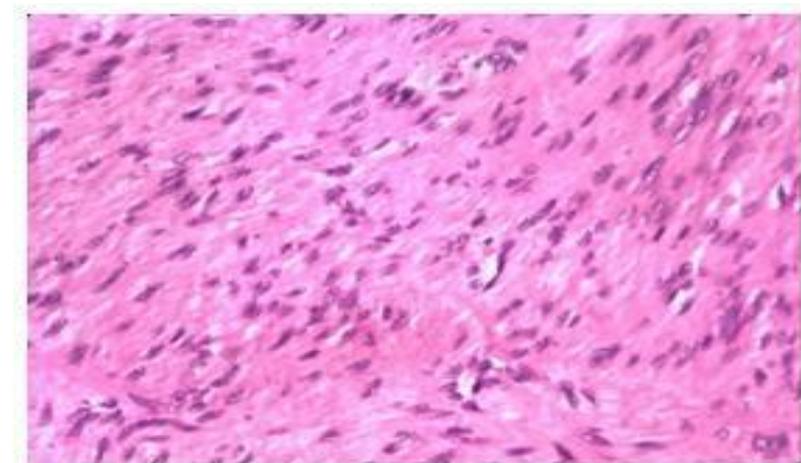


Fig :6 : Neoplastic Cells – Spindle Shaped With Moderate Eosinophilic Cytoplasm And Elongated Nuclei .H& E 400x.

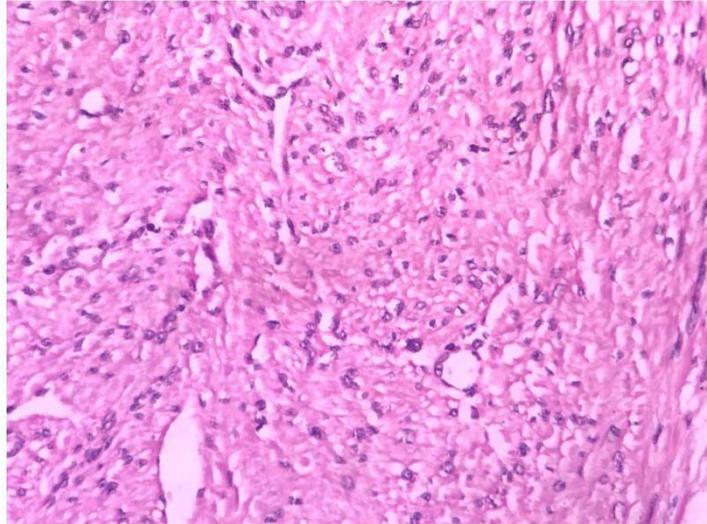


Fig 7: Dilated Vessels Are Seen. H&E 400 X.

2.3 Immunohistochemistry :

Immunohistochemistry Showed Sma And Cd 34 Positivity On Smooth Muscle And Endothelium (Fig 8,9).

S-100 And Hmb 45 Showed Negativity.(Fig 10 &11).

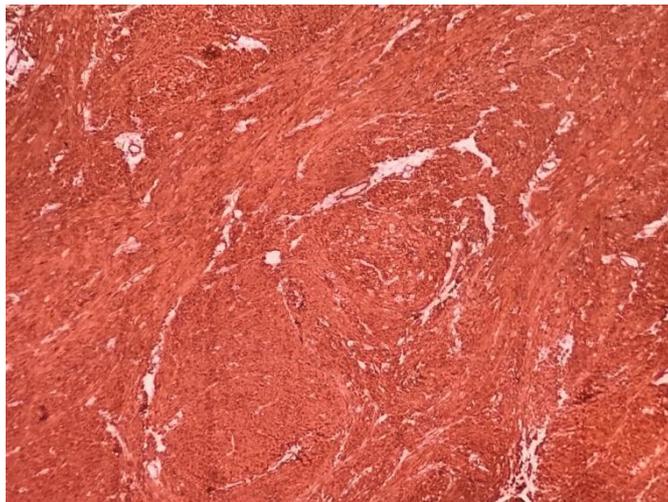


Fig 8: Sma- Strong And Diffuse Positivity .40 X.

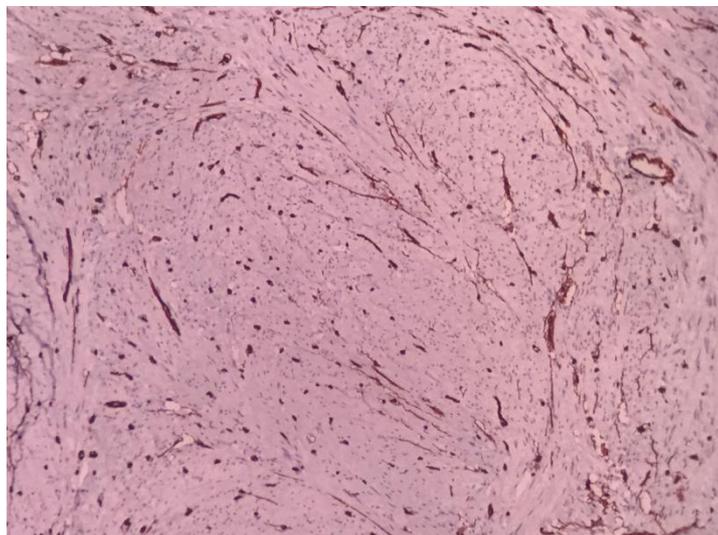


Fig 9: Cd 34- Positive On Endothelium Of Blood Vessels .40 X.

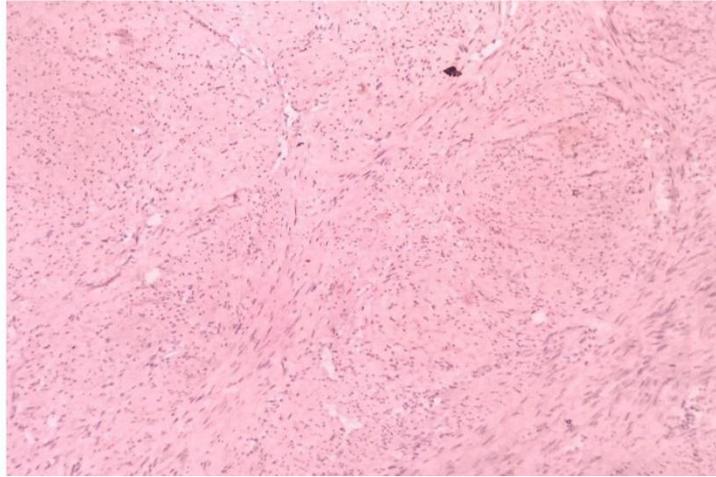


Fig 10: S100- Negative .40 X

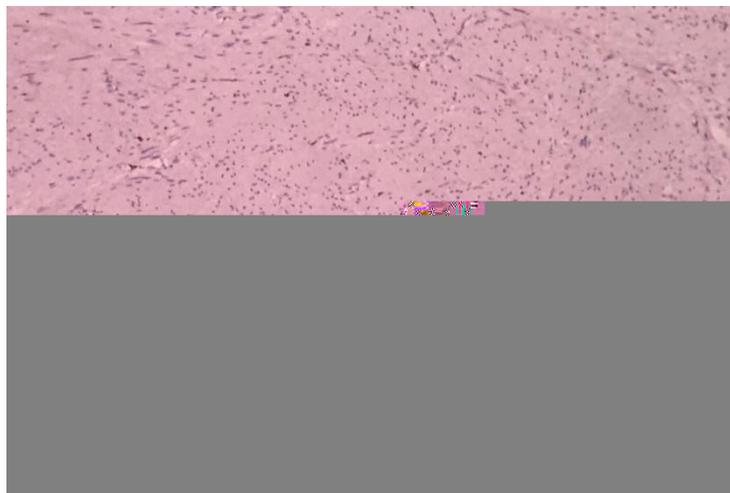


Fig 11: Hmb 45: Negative 40x.

2.4 Impression: With The Microscopic Features And Immunohistochemistry Profile , The Mass Was Diagnosed As Angioleiomyoma Of The Scrotal Wall.

III. Discussion:

Intrascrotal Lesions With Solid Component Determined On Ultrasonography Predict Malignant Potential. So It Is Very Important To Distinguish Between Benign And Malignant Forms.(2)

Leiomyomas Are Benign Tumors That Originate From Smooth Muscle Cells. Leiomyoma Arising From Uterus Is Very Common , But Leiomyoma Originating From Scrotum Is A Rare Entity. (3)

Cutaneous Leiomyoma Accounts For Approximately 5% Of All Leiomyoma , Whereas Scrotal Leiomyoma Have Even Lower Incidence Rate. Benign Lesions Arising From Scrotal Wall Smooth Muscle Are Very Rare In The Literature. Less Than Fifty Cases Have Been Published To Date(4). Angioleiomyoma Is A Vascular Variant Of Leiomyoma.

Angioleiomyomas Originate From Smooth Muscle (Tunica Media) Within The Walls Of The Arteries And Veins. Most Benign Lesions Derived From The Spermatic Cord And Epididymis. Because Of Their Embryological Background, Tumors Arising From The Male Genitalia Structures Are Mesodermal In Origin(5). Angioleiomyoma Are Slow Growing Tumors Presenting In The Fifth Decade Of Life.(6)

3.1 Clinical Features: These Benign Lesions Tend To Be Aymptomatic And Painless Cutaneous Lesion Of 1 To 14 Cm With Average Of 6 Cm (7). Although Some Of The Patients Have Reported Pain In The Later Stages. The Painless Nature Of The Scrotal Angioleiomyoma Is Due To The Slow Growing Nature Of The Tumor That Pushes The Nerve Trunk Outwards Rather Than Compressing It (8)

3.2 Radiological Features: Radiologically, The Imaging Characteristics Of The Mesenchymal Tumors Within The Scrotum Are Often Non Specific. On Ultrasound , The Tumor Is Homogenously Hypoechoic With Well Defined Margins. On Mr Imaging , T1-Weighted Image , The Lesion Appears Homogenously Isotense To Muscle. On T2- Weighted Imaging, It Is Hyperintense With Low Signal Intensity.(9)

3.3 Gross: These Tumours Appear Grey White And Well Circumscribed And Encapsulated.

3.4 Microscopic Features: The Neoplasm Appears Well Circumscribed And Encapsulated With Interlacing Bundles Of Smooth Muscle Fibres Between Vascular Channels. The Vessel Wall Display Layers Of Smooth Muscle Fibres. The Vessels Show Slit Like Or Dilated Lumen. Mitosis Is Generally Absent.

Degenerative Changes May Be Present Including Myxoid Changes , Nuclear Atypia , Stromal Hyalinization And Dystrophic Calcification.

There Are Certain Variants Of Angioleiomyoma Such As Solid, Cavernous, Venous, Epithelioid And Pleomorphic. (10)

3.5 Immunohistochemistry: The Smooth Muscle Cells Express Vimentin , Desmin And Smooth Muscle Actin. The Endothelium Express Cd 34.

3.6 Differential Diagnosis: The Differential Diagnosis Of The Scrotal Wall Mass Include Sebaceous Cyst , Lipoma, Neurofibroma , Fibroma And If Painful , Schwannoma. In Case Of Ulcerative Mass, Scrotal Squamous Carcinoma Should Be Considered In Differentials. (11)

3.7 Treatment: Usually They Are Managed Just With Excision. Radical Orchiectomy May Be Required, Because Peri Operative And Intra Operative Findings Cannot Exclude Malignancy. However Frozen Section Might Be Useful In Discriminating Benign Lesions From Malignant Lesions To Prevent Unnecessary Orchiectomy. (12)

3.8 Follow Up: Follow Up Is Required And If Recurrence Is There A Thorough Investigation Should Be Carried Out To Rule Out Any Possibility Of Malignancy. (12)

IV. Conclusion:

This Case Report Highlights The Clinicopathological Features Of Angioleiomyoma Of Scrotal Wall. Although It Is A Benign Lesion , It Can Mimic Malignancy In View Of The Solid Component In Ht Ultrasonography. However Definitive Diagnosis Is Established By The Pathologist.

References:

- Smooth Muscle Hyperplasia Of The Testicular Adnexa Clinically Mimicking Neoplasia: Clinicopathologic Study Of Sixteen Cases- Barton Jh , Et Al . Am J Surg Pathol, 23 (1999), Pp. 903-909
- [2]. Angioleiomyoma Of The Scrotal Wall- Levend Ozkan. : Journal Of The Chinese Medical Association 74(2011) 275-276.
- Leiomyoma Of Scrotum: A Rare Case Report- Shweta Rani -Iranian Journal Of Pathology (2015)10(3),243-247.:
- Solitary Genital Leiomyoma Of The Tunica Dartos: A Case Report And Review Of The Literature In Japan- Hinyokika Kiyō :-Acta Urologica Japonica-Vol 51 (2005), Pp. 699-701.
- [5]. Case Report: Angioleiomyoma Of The Spermatic Cord: A Rare Scrotal Mass -. M. Ghei, B. Arun, B.H. Maraj, R.A. Miller, S. Nathan Int Urol Nephrol, 37 (2005), Pp. 731-732.
- Uncommon Benign Intrasrotal Tumours. - Chiong E, Tan Kb, Siew E, Rajwanshi A, See H, Esuvaranathan K.-Ann Acad Med Singapore. 2004;33:351.
- [7]. Smooth Tumours Of The External Genitalia: Clinicopathological Analysis Of A Series- Newman Pl, Fletcher Cd-. Histopathol. 1991;18(6):523-9: .
- [8]. A. Leiomyoma Of Scrotum- Sherwani Rk, Rahman K, Akhtar K, Zaheer S, Hassan Mj, Haider. Ind J Pathol Microbiol. 2008;51(1):72-3
- Angioleiomyoma In Soft Tissue Of Extremities :Mri Findings. American Journal Of Roentgenology. Vol.192. Issue 6: Pages.W291-294.
- Scrotal Leiomyomas With Bizarre Nuclei: A Report Of Three Cases- Slone S, Et Al. Mod Pathol 1998, 11(3):282-7.
- Angioleiomyoma Of The Small Intestine - A Rare Cause Of Gastrointestinal Bleeding- Sadat U, Theivacumar Ns, Vat J, Jah A.. World J Surg Oncol. 2007;5:129.
- Atypical Leiomyoma Of Scrotum. - Rao S, Fimate P, Ramakrishnan R, Rajendiran S J Cutan Aesthet Surg. 2012;5(3):216-7.

Dr.A.Keerthy Aberna" Angioleiomyoma of Scrotal Wall- A Rare Case Presentation."IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 4, 2018, pp 64-68