Angioleiomyoma of Scrotal Wall- A Rare Case Presentation.

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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 X 2 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

I. Introduction:
Angioleiomyoma Of The Scrotum Is A Rare Benign Lesion. Smooth Muscle Hyperplasia, Leiomyoma, Leiomyomatous Hamartoma Are Synonyms Used In The Literature. 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. 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 X 2 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)
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.
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 7: Dilated Vessels Are Seen. H&E 400 X.

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

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

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

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