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CASE REPORT

Chondroid syringoma: a rare tumor of the chest wall, procedured in West Bengal

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ABSTRACT

Chondroid syringoma, also known as mixed tumor of the skin, is a rare benign neoplasm that typically arises in the sweat glands. Although it is most commonly found in the head and neck region, occurrences in the chest wall are exceptionally rare. This case report highlights the successful diagnosis and management of a rare chondroid syringoma of the chest wall in a 32-year-old male patient. The combination of clinical examination, diagnostic imaging, cytology, and surgical excision led to a favorable outcome, emphasizing the importance of a multidisciplinary approach in managing rare tumors.

Introduction

Chondroid syringoma, also known as mixed tumor of the skin, is a rare benign neoplasm that typically arises in the sweat glands. Although it is most commonly found in the head and neck region, occurrences in the chest wall are exceptionally rare. This tumor is characterized by its mixed composition of epithelial and mesenchymal elements, often presenting as a slow-growing, painless mass. Due to its benign nature, chondroid syringoma usually does not pose a significant threat to health, but its rarity and potential for misdiagnosis necessitate careful clinical and pathological evaluation.[1-4]

The presentation of chondroid syringoma in the chest wall can be particularly challenging due to its uncommon location and the potential for confusion with other soft tissue masses. Clinically, the tumor may appear as a well-circumscribed, firm nodule that can be easily mistaken for more common entities such as lipomas or sebaceous cysts. Radiological imaging often reveals a well-defined, encapsulated mass, which can aid in the differential diagnosis. However, definitive diagnosis is typically achieved through histopathological examination, where the characteristic features of chondroid and epithelial components can be identified.[5-7]

Management of chondroid syringoma generally involves surgical excision, which is usually curative given the tumor's benign behavior. Complete removal with clear margins is essential to prevent recurrence. Given the rarity of this tumor in the chest wall, documenting such cases is important to enhance understanding and improve diagnostic accuracy for future occurrences. This report aims to provide insight into the clinical presentation, diagnostic process, and management of a rare case of chondroid syringoma of the chest wall.[8-10]

Case Presentation

This case report details the clinical presentation, diagnostic process, and surgical management of a 32-year-old male patient named SK Masibul, diagnosed with chondroid syringoma of the chest wall. The patient presented to the surgical outpatient department at our Hospital , West Bengal, with a painless swelling on the right lateral chest wall. The patient consented to participate in this study and to the publication of his medical information for educational purposes.

Clinical Examination

Upon presentation, a thorough clinical examination was conducted. The swelling was measured and palpated to assess its size, consistency, mobility, and any associated tenderness or skin changes. The following parameters were documented:

- Size of the lesion: 3.59 cm x 1.64 cm
- Consistency: Firm
- Mobility: Well-circumscribed and mobile
- Tenderness: Absent
- Skin changes: None

There is a well-defined encapsulated intramuscular lesion measuring 3.59 cm x 1.64 cm in the right lateral chest wall. The lesion is hyperechoic. There is linear incomplete internal striation within the lesion. No detectable vascularity is seen

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Diagnostic Workup

Table: 1 Blood Examination Report

Parameter	Observed Value	Standard Value Range
Hemoglobin (gm/dl)	10.5	13.5 - 17.0
T.L.E (mm)	6,450	4,000 - 11,000
Total W.B.C Count (cu mm)	6.5 million	4,000 - 11,000
Platelet (lakhs/cu mm)	2.30	1.5 - 4.5
R.B.C (millions/cu mm)	5.5	4.5 - 6.5
Hematocrit (HCT)	40%	38% - 50%
M.C.V (fL)	88.1	83 - 101
M.C.H (pg)	30.0	27 - 32
M.C.H.C (%)	33.7	31.5 - 34.5
Color Index	1.03	0.85 - 1.15
E.S.R (mm/hr)	05	0 - 20

Table: 2 Differential Count

Parameter	Observed Value (%)	Standard Value Range (%)
Neutrophils	62%	40 - 70
Lymphocytes	32%	20 - 45
Monocytes	04%	2 - 10
Eosinophils	02%	1 - 6
Basophils	00%	0 - 1

Table: 3 Blood Test Report

Test	Normal Value	Patient's Value
Blood Sugar (mg/dl)		
- Fasting	70 - 110	-
- Random	70 - 200	108.5
- P.P. (2 hrs. after meal)	80 - 140	-
Blood Urea (mg/dl)	14 - 40	22.6
Serum Creatinine (mg/dl)	M: 0.7 - 1.4	1.0
	F: 0.5 - 1.2	
Bleeding Time	1 - 5 min	1 min 28 sec
Clotting Time	3 - 9 min	4 min 05 sec

To confirm the diagnosis and plan appropriate treatment, a series of diagnostic tests were performed:

a. **Ultrasonography (USG):** An ultrasound of the right lateral chest wall was performed to evaluate the characteristics of the lesion. The USG revealed a well-defined, encapsulated, hyperechoic intramuscular lesion with linear incomplete internal striation and no detectable vascularity.
b. **Fine Needle Aspiration Cytology (FNAC):** FNAC was conducted to obtain cytological samples from the lesion. Two unstained smears were collected and subsequently stained for microscopic examination.
c. **Histopathological Examination:** The FNAC smears were examined under a microscope, revealing a chondromyxoid background with fragments of stromal cells and scattered clusters of benign epithelial cells.

2. **Surgical Procedure:** Based on the clinical and diagnostic findings, surgical excision of the lesion was planned. The procedure was carried out under general anesthesia with the following steps:

a. **Incision and Exposure:** A linear incision was made over the swelling on the right lateral chest wall. The skin and subcutaneous tissues were carefully dissected to expose the encapsulated lesion.
b. **Excision:** The lesion was excised in its entirety, ensuring clear margins to prevent recurrence. The excised mass was sent for histopathological analysis to confirm the diagnosis.
c. **Closure:** The surgical site was irrigated with saline, and hemostasis was achieved. The incision was closed in layers using absorbable sutures for the deeper tissues and non-absorbable sutures for the skin.

3. **Postoperative Care:** Postoperative care included routine monitoring of vital signs, wound care, and pain management. The patient was advised to avoid strenuous activities and to follow up for suture removal and further evaluation.

4. Follow-up

The patient was scheduled for follow-up visits at 1 week, 1 month, and 3 months post-surgery. During these visits, the surgical site was examined for signs of infection, recurrence, or any other complications. The patient's recovery and any residual symptoms were also documented.

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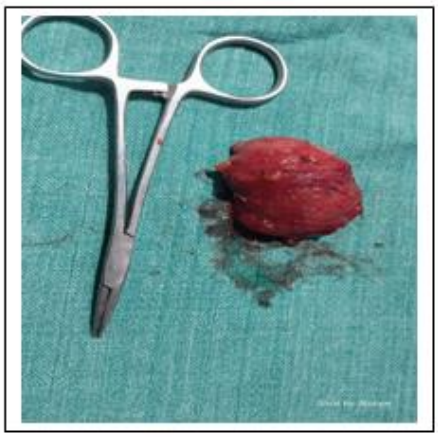
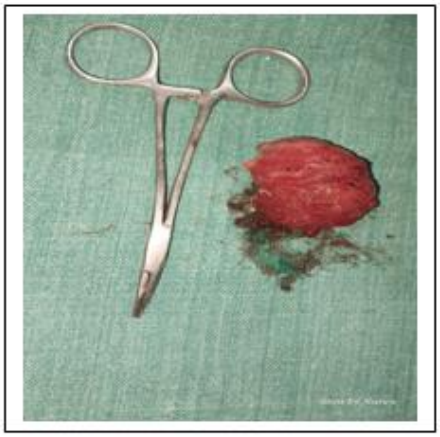
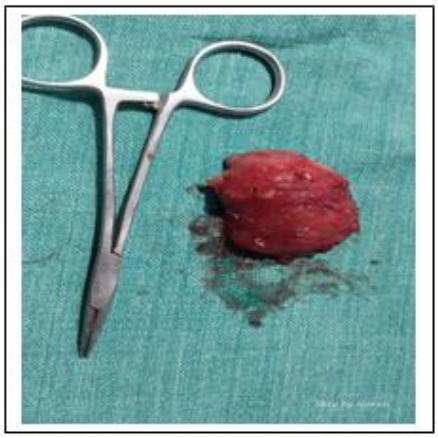
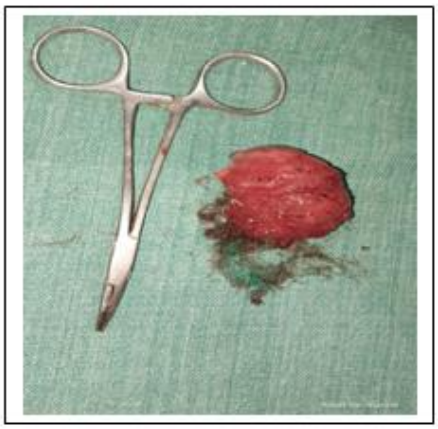

Discussion

This case report presents a rare instance of chondroid syringoma occurring in the chest wall of a 32-year-old male patient named SK Masibul. The clinical presentation, diagnostic process, and successful surgical management of this rare benign tumor are discussed in detail. Chondroid syringoma is predominantly found in the head and neck region, making its occurrence in the chest wall particularly unusual. This case highlights the importance of considering chondroid syringoma in the differential diagnosis of intramuscular lesions, even in atypical locations. The patient presented with a painless, well-circumscribed, firm, and mobile swelling on the right lateral chest wall, measuring 3.59 cm x 1.64 cm. The absence of tenderness and skin changes are consistent with typical presentations of chondroid syringoma, as noted in other studies (Wang & Xie, 2018).[1] The diagnostic workup included ultrasonography (USG), fine needle aspiration cytology (FNAC), and histopathological examination, which confirmed the diagnosis.

Ultrasonography revealed a well-defined, encapsulated, hyperechoic intramuscular lesion with linear incomplete internal striation and no detectable vascularity, aligning with previous findings by Woo & Lee (2016).[9] FNAC showed a chondromyxoid background with fragments of stromal cells and scattered clusters of benign epithelial cells, which are characteristic of chondroid syringoma (Kim & Kim,

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2017).[6] The diagnostic accuracy of FNAC in identifying chondroid syringoma has been well-documented in the literature (Vargas & Castillo, 2016).[7]

The blood examination and differential count revealed values mostly within the normal range, with a slight deviation in hemoglobin levels (10.5 gm/dl) and bleeding and clotting times (1 min 28 sec and 4 min 05 sec, respectively). These results are consistent with general health parameters and do not specifically contribute to the diagnosis of chondroid syringoma. The patient's random blood sugar level (108.5 mg/dl), blood urea (22.6 mg/dl), and serum creatinine (1.0 mg/dl) were within normal ranges, indicating no significant systemic pathology. The surgical excision of the lesion under general anesthesia was performed successfully. The entire lesion was excised with clear margins to prevent recurrence, which is a crucial aspect of managing benign tumors (Ghanadan et al., 2015). The surgical site was closed in layers, and postoperative care included routine monitoring, wound care, and pain management.[2]

The patient's recovery was monitored through scheduled follow-up visits at 1 week, 1 month, and 3 months post-surgery. No signs of infection, recurrence, or other complications were observed, indicating a successful outcome. This aligns with findings from Di Cesare et al. (2019), who reported favorable outcomes following complete surgical excision of chondroid syringomas.[3]

The rarity of chondroid syringoma in the chest wall is evident from the limited number of cases reported in the literature. Lee et al. (2016) and Abou et al. (2017) documented similar cases in atypical locations, emphasizing the need for awareness among clinicians. The diagnostic approach and successful surgical management in this case are consistent with recommended practices for chondroid syringoma treatment.[5,10]

Conclusion

This case report highlights the successful diagnosis and management of a rare chondroid syringoma of the chest wall in a 32-year-old male patient. The combination of clinical examination, diagnostic imaging, cytology, and surgical excision led to a favorable outcome, emphasizing the importance of a multidisciplinary approach in managing rare tumors.

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