Case Report
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Osteochondroma of the Pubic Ramus Presenting with Sexual Dysfunction: A Case Report.

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ABSTRACT

Background; Osteochondroma is the most common benign bone tumor, usually affecting long bones. While solitary osteochondromas are usually benign, they can occasionally cause complications such as compression of adjacent structures, vascular or neurological impingement, or, in rare cases, malignant transformation into secondary chondrosarcoma. Pelvic osteochondromas are rare but can sometimes lead to significant functional and psychosocial distress.
Observation: We present a 21-year-old female patient with a six-year history of progressively enlarging pelvic osteochondroma in the right groin. The tumor caused difficulty in wearing fitted clothing, mechanical obstruction during sexual intercourse, and marital and social stigma. Despite its large size, there were no urinary or neurological symptoms. Surgical excision provided complete symptomatic relief and improved her quality of life.
Conclusion: This case highlights the atypical presentation and location of a benign bone tumor. Early surgical intervention should be considered in cases where the tumor leads to significant distress, even in the absence of pain or compression. This case reinforces the need to prioritize patient quality of life and highlights the significant role of surgical management in improving both functional and psychological well-being.
Key words: Osteochondroma, Pubic Ramus, Sexual Dysfunction.

INTRODUCTION

Osteochondromas constitute 35–40% of all benign bone tumors, commonly occurring in the metaphysis of long bones.[1] Pelvic osteochondromas are uncommon and can present with mechanical compression, pain, or cosmetic concerns. In rare cases, they may affect social interactions, sexual function, and emotional well-being.[2]This case report highlights a young

female whose pelvic osteochondroma caused sexual dysfunction, marital distress, and social stigma, emphasizing the psychosocial implications of benign bone tumors.[3,4]

CASE REPORT

A 21-year-old female patient from a rural locale presented to our clinic with a 6-year history of a right inguinal mass. The mass exhibited an insidious onset, initially small but progressively increased in size, impeding her ability to wear clothing. She reported associated mild discomfort. Furthermore, it led to significant dyspareunia, contributing to marital discord, compounded by her husband's expressed concern regarding the lesion. Medical consultation was delayed due to limited health literacy. Further history revealed an absence of sensory or motor deficits. No analogous lesions were observed in other regions, nor was a familial history of the condition reported. Additionally, the patient's medical history was unremarkable for prior fractures, radiation exposure, or chronic systemic illnesses.

CLINICAL FINDINGS

On physical examination, a pertinent finding was observed in the right pubic region: a firm, bony mass, measuring approximately 4 x 7 cm, located at the right pubic tubercle.[Figure 1] The mass was non-tender and immobile, appearing fixed to the underlying pubic bone. The overlying skin was mobile, without evidence of discoloration or ulceration. The remainder of the physical examination was unremarkable.

DIAGNOSTIC ASSESSMENT

Imaging studies, including pelvic X-ray, CT, and MRI, were performed. The CT demonstrated a bony growth measuring 54 x 48 x 86 mm (transverse, craniocaudal, and anteroposterior dimensions) arising from the right superior pubic ramus and situated extrapelvically.[Figure 2] MRI further revealed a 4 mm thick cartilage cap, with no evidence of soft tissue, neurovascular or urinary tract involvement

THERAPEUTIC INTERVENTION

Following preoperative optimization, the patient underwent surgical excision of the mass. Under regional anesthesia, the patient was positioned supine on the operating table. A transverse suprapubic skin incision was made, and careful dissection of the soft tissue exposed the mass.[Figure 3] The mass was meticulously excised from its bony attachment using an osteotome. Subsequently, the wound was closed in anatomical layers [Figure 4]. The excised specimen was submitted for histopathological evaluation, which showed mature bony trabeculae covered by hyaline cartilage, confirming the clinical diagnosis of benign osteochondroma [Figure 5].

FOLLOW-UP AND OUTCOMES

The patient experienced an uneventful postoperative recovery. Home discharge occurred on postoperative day three, followed by a one-year monitoring period during which no new growth or recurrence was seen. Following the surgical procedure, the patient reported a resumption of normal daily activities and indicated improvements in both self-esteem and marital relations.

DISCUSSION

Osteochondromas constitute the most prevalent benign bone tumors, accounting for approximately 35% to 40% of all benign osseous neoplasms.[1,2,4,5] These typically originate from the metaphyses of long bones, with the femur and tibia being the most commonly affected sites. Nevertheless, pelvic Osteochondromas are exceptionally rare, representing a minor proportion of reported cases. Our presented case exemplifies one such infrequent pelvic osteochondroma.

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Osteochondromas result from aberrant cartilage growth at the growth plate, forming an exophytic lesion composed of mature bone covered by a hyaline cartilage cap. These lesions are typically slow-growing and stop enlarging once skeletal maturity is reached.[2,3,4] While solitary osteochondromas are usually benign, they can occasionally cause complications such as compression of adjacent structures, vascular or neurological impingement, or, in rare cases, malignant transformation into secondary chondrosarcoma. The risk of malignant transformation is generally low (<1%) in solitary osteochondromas but is higher in cases of multiple hereditary exostoses.[3,4,5,6]

These benign tumors often remain asymptomatic but can lead to mechanical discomfort, restricted movement, and cosmetic concerns when they grow significantly in size.[1,3] While cosmetic concerns were present for the patient, her principal reason for seeking medical attention was sexual dysfunction and the resultant marital discord. She reported significant sexual discomfort and subsequent relational strain, contributing to profound psycho-social distress. In conservative societies, many patients delay seeking medical care due to fear of surgery or social stigma associated with visible deformities.[7]

Imaging modalities, such as X-ray, CT and MRI, are crucial for evaluating tumor characteristics and guiding surgical planning.[8] In the present case, preoperative imaging utilizing these modalities affirmed the presence of a well-defined, pedunculated osteochondroma lacking aggressive features, thus facilitating a direct surgical approach.

The decision to proceed with surgical excision was based on the patient's discomfort, functional limitations, and emotional distress. Given its large size and significant impact on the patient's quality of life, surgical excision was indicated.

Owing to the superficial anatomical position of the tumor, the surgical procedure was relatively straightforward, involving exposure, meticulous dissection, and complete excision. Subsequent histopathological evaluation confirmed a benign osteochondroma, with no evidence of malignant transformation, thereby precluding the need for further oncological intervention. Consistent with findings in similar cases, the postoperative outcome was excellent, characterized by complete symptomatic relief, enhanced self-confidence, and an overall improvement in quality of life.[4-8]

FIGURES

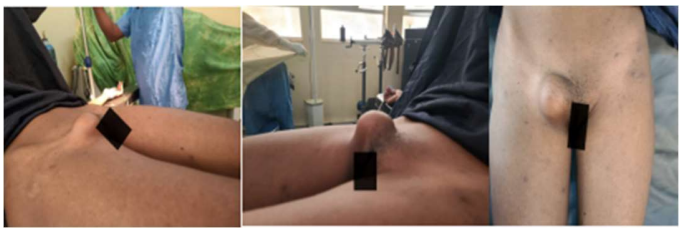

Figure 1

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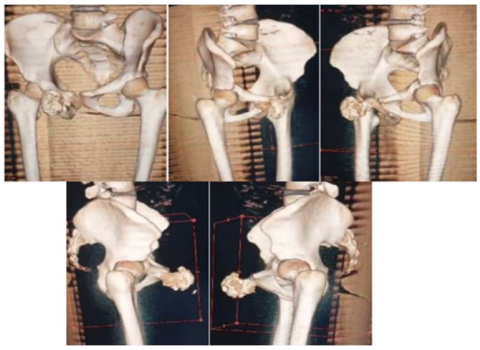

Figure 2

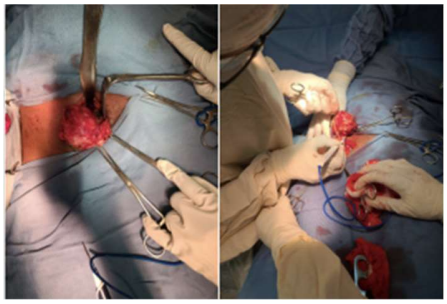

Figure 3

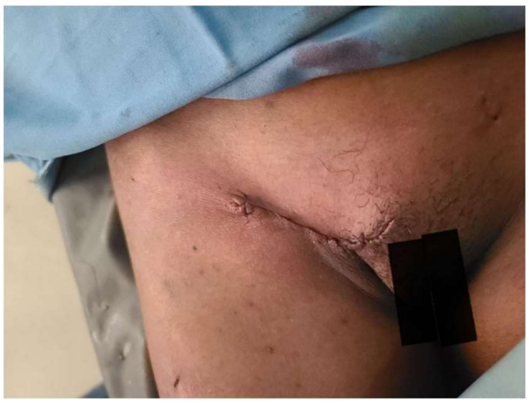

Figure 4

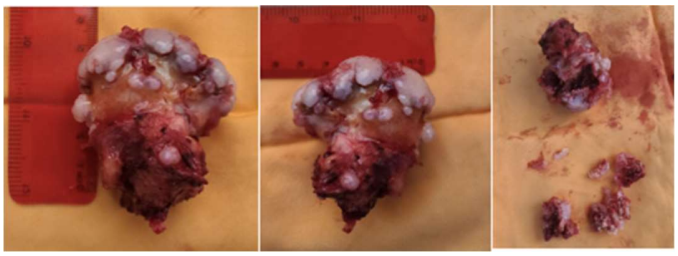

Figure 5

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CONFLICT OF INTEREST

There are no conflicts of interest with this article.

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INFORMED CONSENT

Written informed consent was obtained from the patient for publication of this case report and accompanying images. We extend our gratitude to the patient for consenting to publish her clinical information.

AUTHORS CONTRIBUTION

Kidanemariam Abrha - Writing – review & editing. Writing-original draft, visualization, conceptualization

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Zeamanuel Berihu Teshome – Investigation, conceptualization.

Mezgebu aregawi– writing – review & editing, Conceptualization

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LEGENDS TO FIGURES

Figure 1: A clinical image showing a firm, bony mass, measuring approximately 4 x 7 cm, located at the right pubic tubercle

Figure 2: 3-D CT scan image shows an anteriorly projecting bony mass attached to the right pubic tubercle

Figure 3: The in situ visualization of the mass was achieved subsequent to the dissection of the adjacent soft tissue.

Figure 4: This image depicts the post-excision appearance of the closed surgical wound.

Figure 5: This picture shows excised mass that was sent for histopathologic evaluation.

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