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## SOLITARY INGUINOLABIAL NEUROFIBROMA MIMICKING AN INGUINOLABIAL HERNIA: A CASE REPORT

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### ABSTRACT

*Solitary inguinolabial neurofibroma is very rare. We present a case of a 54-year-old farmer, with a 2-year history of progressive right groin swelling. Intra-operative findings revealed a well circumscribed soft-tissue tumor extending from the inguinal canal into the labia majora. The tumor was excised and a histologic diagnosis of neurofibroma made. We report this case because of the rarity of its form of presentation and its mimicking an inguinolabial hernia.*

**KEYWORDS:** *Inguinal region, labia majora, neurofibroma.*

### INTRODUCTION

Neurofibromas are benign well differentiated tumors involving the peripheral nerve sheath.<sup>1</sup> These tumors can occur as focal cutaneous or subcutaneous, or as diffuse or nodular plexiform lesions.<sup>1</sup> They may be sporadic or associated with neurofibromatosis type I and II syndromes.<sup>2,3</sup> They are usually asymptomatic and slow growing. Neurofibromas rarely occur in the labial region of females, more so when they are solitary and are not associated with von Recklinghausen's disease.<sup>4,5</sup> These rare neurofibromas could easily be misdiagnosed as hernias especially when very small or large. In these cases careful history and physical examination may help differentiate these lesions from the commonly occurring inguinolabial hernias.

### CASE PRESENTATION

A 54-year-old female farmer, para5+0, five years post menopause, presented to our

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surgical outpatient clinic with a 2-year history of a gradually increasing right groin swelling that became painful 1 year prior to presentation. There were no symptoms of intestinal obstruction. It was irreducible from the onset. There was no history of trauma. There was no history of any other swelling in the body or café-au-lait spots and no family history of similar swellings. Physical examination revealed a right inguino-labial swelling that measured 16cm by 10cm (Figure 1). It was tender, firm, irreducible and not attached to the skin. The patient presented with an abdomino-pelvic ultrasound scan result which showed normal features. Complete blood count and urinalysis were normal. Intra-operative findings showed a well circumscribed firm soft-tissue tumor extending from the inguinal canal into the labia majora (Figures 2, 3 and 4); its proximal end was 2 cm from the deep inguinal ring. Though the proximal part of the tumour was within the inguinal canal, there was no breach of the posterior wall of the canal. The tumor was totally excised, and the posterior wall of the inguinal canal was reinforced by Modified Bassini's repair because it was weak.<sup>6</sup> The post operative period was uneventful and the histopathologic diagnosis of neurofibroma was made. The patient was counseled on post operative complications including recurrence. She was seen regularly at the clinic for two years and no recurrence was observed.

### DISCUSSION

Solitary neurofibromas rarely involve the female genital region with only a few reports in the literature.<sup>5</sup> Vulvar neurofibromas make up about 5% of vulvar lesions and most of these are associated with Von Recklinghausen's disease and are less than



Figure 1: Right inguino-labial swelling (inguino-labial tumour)



Figure 4: Right inguino-labial region during skin closure

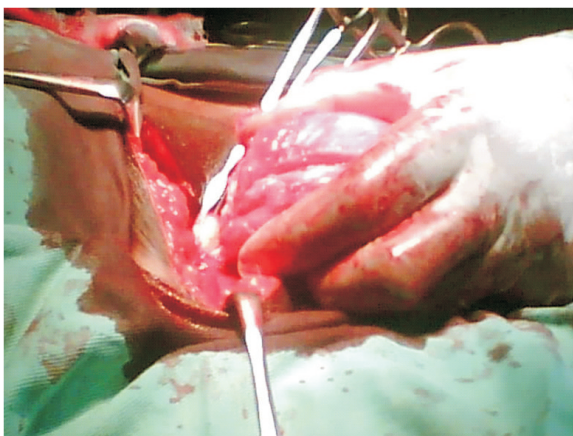


Figure 2: Excision of the inguino-labial tumour



Figure 3: Cut surface of the inguino-labial tumour (neurofibroma)

3cm in diameter unlike in our case.<sup>4,7,8</sup> An association with trauma has been reported in the literature but there was no such history in this case.<sup>4</sup> Urinary tract neurofibromatosis can also be associated with these lesions but there was no history of urinary symptoms and

findings on urinalysis and abdomino-pelvic ultrasound scan did not suggest as such.<sup>4</sup> Though inguinal hernia is commonly found in this area, the findings of a proper examination should clearly differentiate this case from a hernia. The mass had no visible and palpable cough impulse, was firm and irreducible, and did not increase in size on Valsalva's manoeuvre. However histopathologic examination was required to clinch the diagnosis. The rarity of the location of this tumor in the inguinolabial region makes it reportable. This also helps to add to the limited literature.

### CONCLUSION

Solitary neurofibromas can occur in the inguinolabial region of females and should be considered among the differential diagnosis of swellings in this area.

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