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Case Report

Premenarchal labia minora hypertrophy

Karoon Agrawal, Pankaj Kumar Patel, Shamendra Anand Sahu

Department of Burns, Plastic and Maxillofacial Surgery, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi, India

Address for correspondence: Dr. Karoon Agrawal, Department of Burns, Plastic and Maxillofacial Surgery, Vardhman Mahavir Medical College and Safdarjung Hospital, T-23 First Floor, Green Park Main, New Delhi - 110 016, India. E-mail: karoonaparna@gmail.com

ABSTRACT

Labia minora hypertrophy is a relatively uncommon surgical entity being popularised in the realm of vulvovaginal plastic surgeries. Apart from the unaesthetic appearance of the hypertrophied minora, these cases are also associated with itching, hygiene problem, pain while sitting down, sports activities, difficulty in wearing tight clothing, bleeding and discomfort while or after sexual intercourse, social embarrassment, insecurity and psychological diminution of confidence and self-esteem. In a country like India, due to sociocultural reasons, patients hesitate to consult a doctor for such deformities. Most of the patients suffer in silence for years. Although common in the west, very few surgeons in the country perform this simple and rewarding surgery. Here, we are presenting a case of premenarchal juvenile labia minora hypertrophy (JLMH) in an 8-year-old child. Labial hypertrophy in this age group is uncommon. We were unable to find hypertrophy of labia minora in the eight-year-old child on English literature search.

KEY WORDS

Labiaplasty; labia minora; labia minora hypertrophy; juvenile labia minora hypertrophy

INTRODUCTION

There is an increasing concern amongst the women and girls about the appearance of their external genitalia. Many women and adolescent girls present with labia hypertrophy. A young girl presenting with labia hypertrophy is quite unusual. A child with severe hypertrophy of bilateral labia minora is being presented with its management.

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CASE REPORT

Patient A, youngest of six female siblings, was born at term in a hospital through the lower segment caesarean section. At 8 years of age, she noticed progressive increasing size of labia, which caused her pain while prolonged sitting, walking and daily activities. She was uncomfortable with tight undergarments and clothing.

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The labia sticking to the undergarments made her feel very uncomfortable throughout the day. She was unable to maintain her personal hygiene. The increased size of labia affected her psychologically as she considered herself abnormal among her siblings. She disclosed the enlargement to her elder sister almost after 6 months of noticing it, and the patient consulted the plastic surgery clinic at the age of 8½ years.

On clinical examination, her labia minora was found to be thickened and enlarged more than 5.5 cm from the free edge of the labia majora with associated hypertrophy of the clitoral hood [Figures 1 and 2] (Type 6: Franco's classification;[1] severe hypertrophy: Ricci and Pardo classificatio[2]) [Tables 1 and 2]. The labia were darkly pigmented and smeared with whitish discharge consistent with chronic irritation. The rest of the external genitalia was within normal limit.

On work-up, her hormonal assay revealed no abnormality. Her thyroid profile, serum luteinizing hormone, serum follicle-stimulating hormone, serum testosterone and serum estradiol levels were within normal limits. Abdominopelvic ultrasound revealed no abnormality of the internal genital organs.

She was sexually inactive with no history suggestive of trauma or assault.

The labiaplasty was performed under general anaesthesia in lithotomy position. Skin and subcutaneous tissues in the labia minora were found to be hyperplastic. Extended linear excision was performed which included excision of hypertrophied clitoral hood [Figures 3 and 4]. After 24 h, the patient was advised to clean the genitalia with application of antiseptic ointment. Postoperatively, the patient complained of severe pain and was prescribed analgesics. There was oedema of the region, which subsided in 4 days. Postoperative recovery was uneventful [Figure 5a and b].

Table 1: Franco classification of labia minora hypertrophy

Type	*Labial width (cm)*
1	<2
2	2-4
3	4-6
4	>6

Table 2: Ricci and Pardo classification of labia minora hypertrophy for surgical correction

Type	*Labial width (cm) and character*
Lacking true hypertrophy	Up to 2 cm and no zone of greater growth but with morphological defect such as asymmetry
Moderate true hypertrophy	2-3 cm with zones of greater growth
Severe true hypertrophy	>4 cm with or without zone of greater growth/ hypertrophy

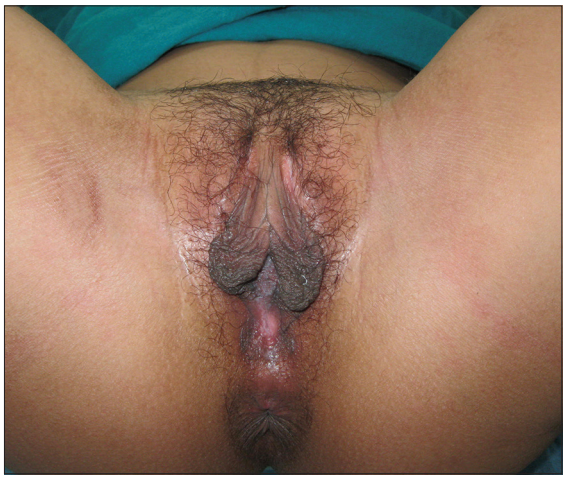

Figure 1: Pre-operative view of labia minora hypertrophy

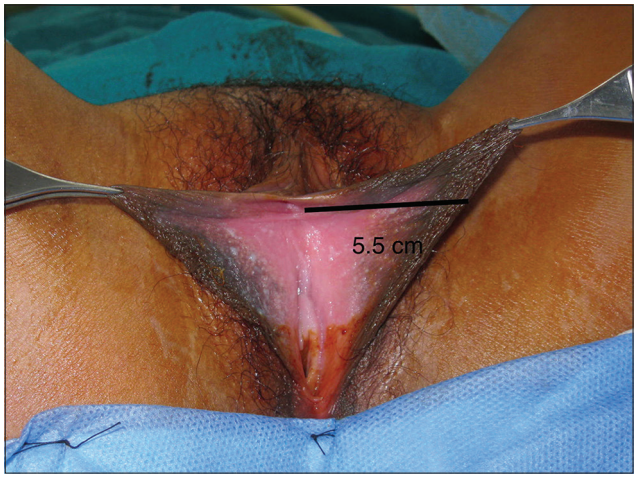

Figure 2: Size of labia minora measuring 5.5 cm in its width

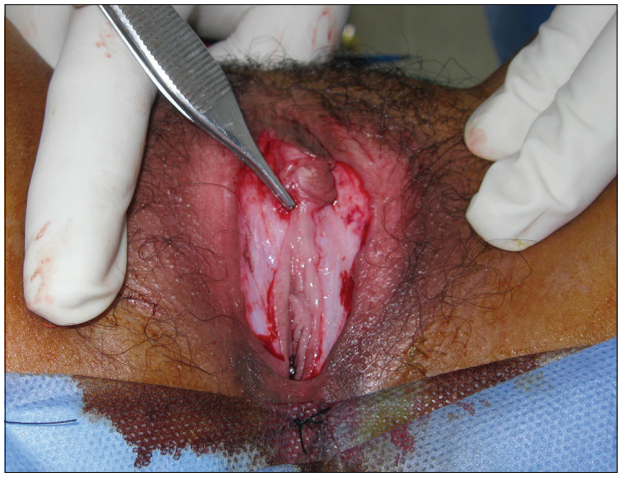

Figure 3: Linear excision of labia minora and clitoral hood reduction

Histological examination showed acanthosis and chronic non-specific inflammation of underlying dermis [Figure 6a and b].

DISCUSSION

Hodgkinson and Hait first described labia minora hypertrophy in 1984; though description regarding circumcision of labia minora and clitoris has been mentioned vaguely in many old scriptures.[3] Juvenile labia minora hypertrophy [JLMH] is a less common clinical condition and becomes rarer in a developing country like India where social taboos and customs are stringently enforced in the common lives. In such milieu, JLMH cases are detected only when symptoms significantly affect a patient's functional and psychological well-being. Hence, whenever a surgeon in a developing country like India diagnoses a JLHM patient, it should be addressed properly, and relevant procedure should be carried out to relieve the patient from distressing symptoms.[4]

Although no standard consensus has been established yet to classify labia minora hypertrophy; many do exist depending on the size and severity of the hypertrophy [Tables 1 and 2].

Arbitrary landmarks taken in these measurements make it difficult to diagnose hypertrophy on a standard scale. Some have measured size from midline horizontally, and some have measured from free edge. It is indeed of great importance to include patient's own symptoms in the diagnosis. Surgical decision should largely be dependant on labia size as well as symptoms addressed by the patient.

A number of studies have been published in context to labia minora hypertrophy and their management, but only a few have addressed the occurrence of hypertrophy in adolescent age and most of their patients fall in 20–40 age group.[5,6]

Although age is not a criterion for labiaplasty, most of the surgeons refrain from doing it at an early age.[7] Our patient was an 8-year-old when she noticed labial hypertrophy, which is rare. All the relevant investigations, including hormonal assays and USG were normal suggestive of an idiopathic, isolated and abnormal morphology of the labia.

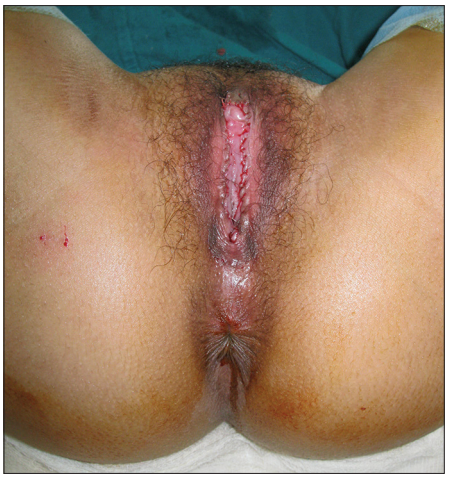

Figure 4: Immediate post-operative result

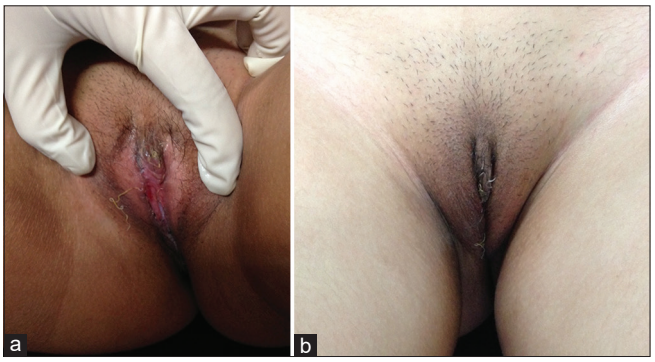

Figure 5: (a and b) Post-operative result after two weeks with good aesthetic appearance

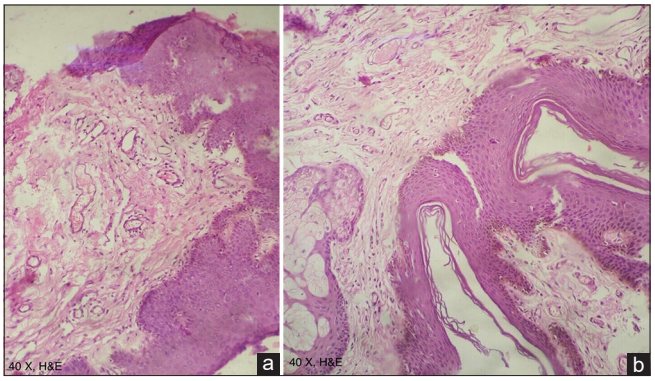

Figure 6: (a and b) Histological picture illustrating mild acanthosis with mild chronic non-specific inflammation with congestion (×40, H and E)

CONCLUSION

The size of the labia minora as well as presenting symptoms should be taken into account, while planning labiaplasty in any age group, especially in adolescents. A better classification system for labia minora hypertrophy and standardization regarding functional and cosmetic labiaplasty need to be established in this era of ever increasing vulvovaginal surgeries.

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Conflicts of interest
There are no conflicts of interest.

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