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Giant Natal Cleft Nevus Lipomatosus Cutaneous Superficialis: A Case Report and Literature Review

Adel Ahmed Al-Fayez[1*], Alaa Sedik[2], Mohammed Ibrahim Elsayed[3], Abrar Naif AlSdairi[4]

[1]Resident, Prince Sultan Medical Military City, Department of Pediatric Surgery, Riyadh-Saudi Arabia

[2]Consultant, King Khalid Hospital, Department of General Surgery, Ha'il-Saudi Arabia

[3]Specialist, King Khalid Hospital, Department of General Surgery, Ha'il-Saudi Arabia

[4]Resident, King Abdullah bin Abdulaziz University Hospital, Department of General Surgery, Riyadh-Saudi Arabia

[*]**Corresponding author:** Adel Ahmed Al-Fayez, Prince Sultan Medical Military City, Department of Pediatric Surgery, Riyadh, Saudi Arabia. E-mail: paedsur.alfayez@gmail.com

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Abstract

Encountering a huge natal cleft soft tissue protruding mass is extremely rare and even not well understood in literature. Pilonidal condition with a natal cleft papilloma or a giant nevus is infrequently reported. Our case is a healthy young man who has a natal cleft pedunculated mass, which causing cosmetic disfigurement and psychological discomfort, with unknown underlying illnesses or previous self-limited similar attacks. The patient was managed with a complete surgical excision of the mass, and no recurrence was encountered on follow up.

Keywords: Nevus lipomatosus cutaneous superficialis; Giant; Skin hamartomas

Introduction

Nevus Lipomatosus Cutaneous Superficialis (NLCS) is a benign hamartoma characterized by the presence of mature ectopic adipocytes in the dermis. Pilonidal disease is a common condition of the skin and subcutaneous tissue at or near the upper part of the natal cleft of the buttocks [1]. (NLCS) was first described in 1921 by Hoffman and Zurhelle, and has been classified into 2 clinical forms: classical and solitary [2]. The classical type is usually composed of multiple groups of skin-colored, pedunculated nodules. The solitary type is characterized by a solitary dome-shaped or sessile papule or nodule [3]. However, when a surgeon encounters rare or unusual condition it could pose a difficulty in its management including preoperative workup, surgical technique, and postoperative outcomes.

Case Report

This is a 25 years-old male patient who presented to our outpatient service with a history of natal cleft protruded mass for 2 years. The mass is soft, pedunculated with stalk at its origin and painless, with no discharge, sinuses or ulceration (Figure 1). He had this mass for 2 years, with no previous medical versus surgical management. The patient is medically free with no past medical or surgical history, and with no previous similar lesions. Initial Complete Blood Count and coagulation profile were normal. Other labs including: Electrolytes, Liver function tests, Lipid profile and virology screen were unremarkable.

Initially, Duplex Ultrasound was done looking for any connection with major blood vessels "which revealed no connection with major blood vessels, only small arterial tributaries". Later on, he underwent a pelvic Computed Tomography (CT) scanning to assess if there is a communication with the spinal vertebrae or pelvic bone vs pelvic structures. Fortunately, nothing was encountered as well as there is no communication with the previously mentioned structures.

The case was approached surgically under general anesthesia, as the mass was pedunculated with stalk, complete surgical excision was achieved successfully, revealing a small defect which was repaired primarily (Figure 2). Postoperatively, histological analysis revealed a Nevus Lipomatous Cutaneous Superficialis, with no malignancy (Figure 3). No complications or recurrence were encountered postoperatively for a follow up period of 36 months.

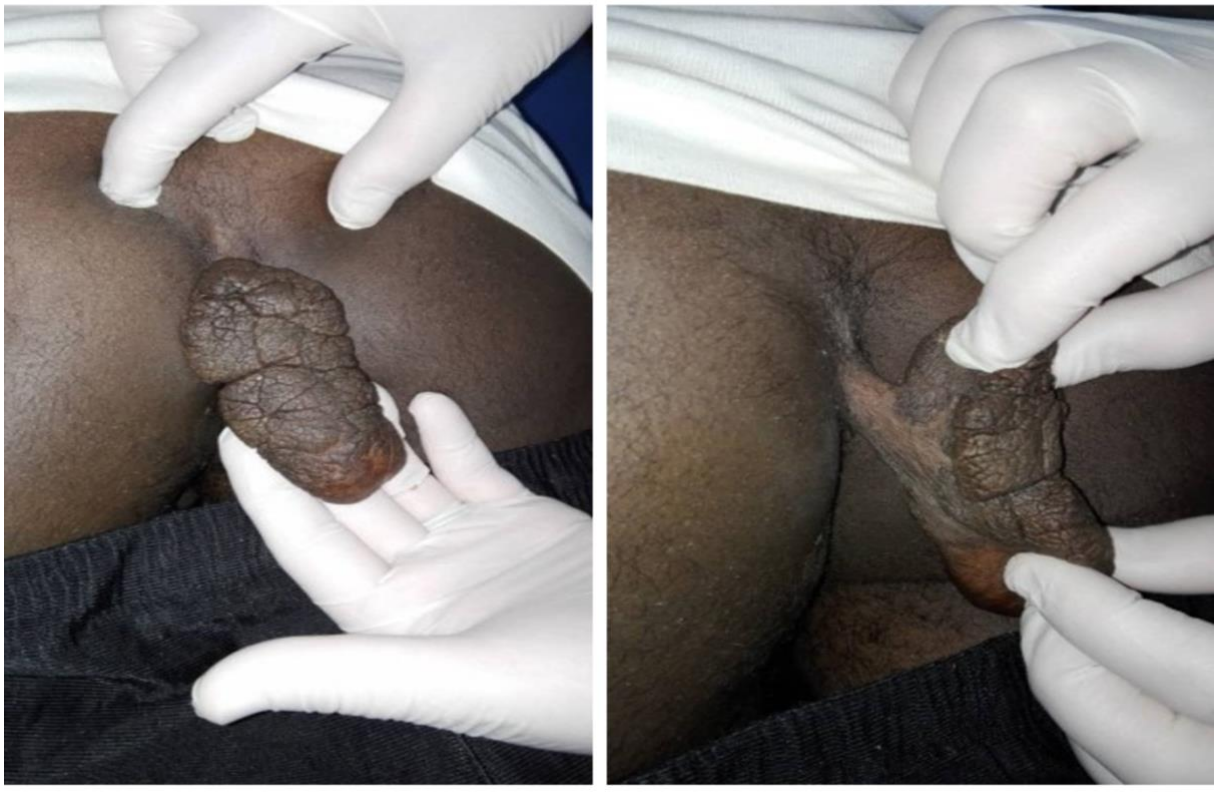

Figure 1: Appearance of the lesion on physical examination.

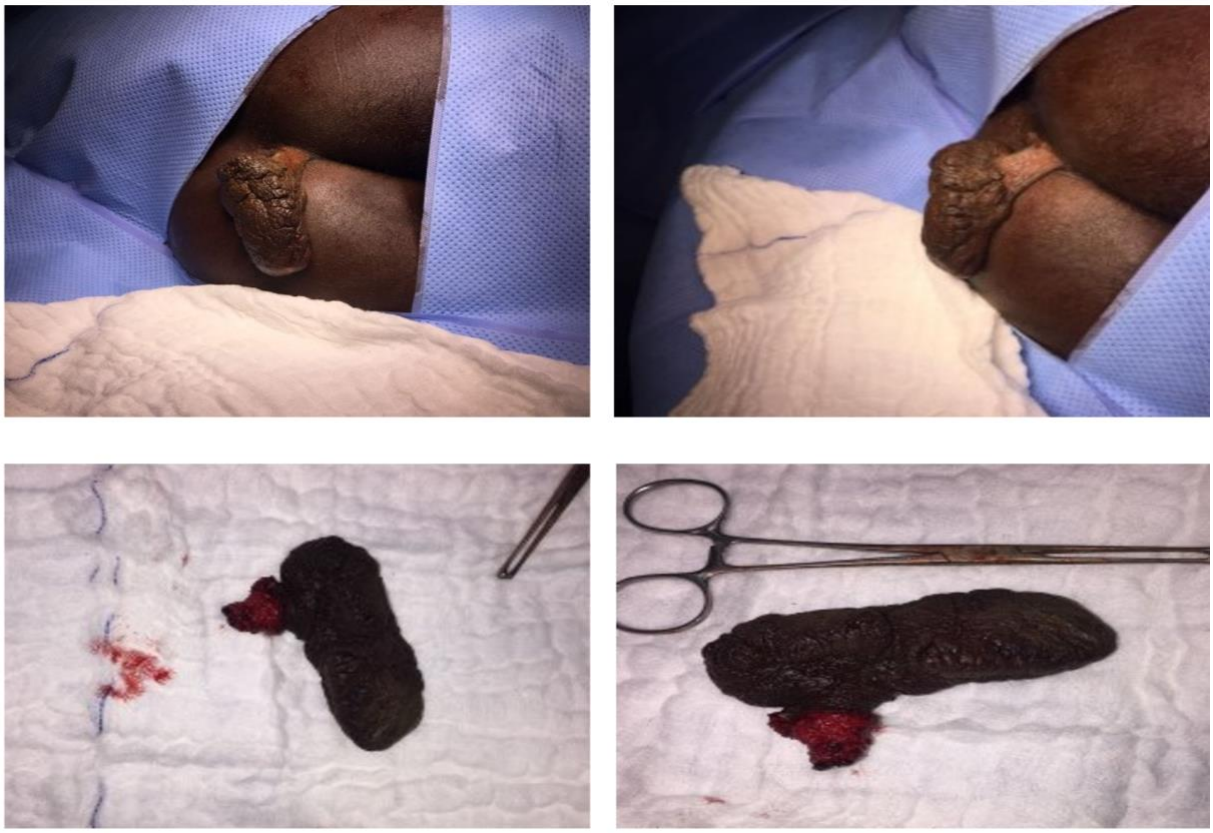

Figure 2: Intraoperative findings, after the surgical excision of the mass.

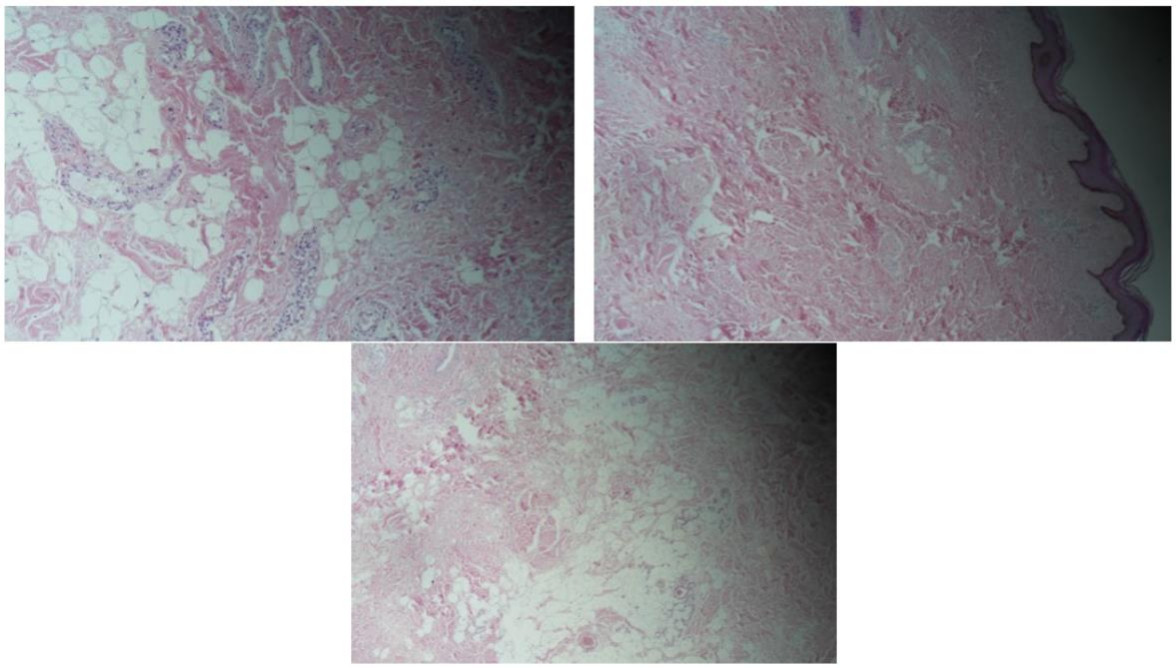

Figure 3: Histopathological analysis showing section of skin with scattered aggregates of mature adipocytes in the dermis with no capsule or connection to the subcutaneous fat.

Discussion

The incidence of (NLCS) is unknown due to its rarity, and the etiology remains unclear. Often it can be seen at birth, but may appear as well during the 1st decade of life, with no familial or sex predilection [4]. The lesion often involves lumbar, buttock, trunk, extremities, linear or segmental fashion with unknown percentage [5]. (NLCS) is mostly an asymptomatic lesion, that can be there unnoticed for long time, and the Differential diagnosis would include neurofibroma, nevus sebaceous, angiolipoma, plexiform neurofibroma, connective tissue nevus, vascular malformation or lipomatosis [5,6].

Laboratory, and radiological workup usually are not warranted, and as well not reported in similar cases in the literature. This lesion required histopathological analysis which shows proliferation of ectopic mature adipocytes in the reticular dermis, which comprising 10–50% of the lesion [7].

Giant (NLCS) required surgical management, and repair of the skin defect usually required plastic or reconstructive surgery, due to large size lesion, and resulting cosmetic disfigurement. In our case the resulting post-surgical excision skin defect was small which did not require reconstructive surgery. The main indication for surgical excision is for cosmetic reasons, and or psychological discomfort. Other Cases can be managed with cryotherapy only for patients who do not want surgery with partially satisfactory outcome [8]. Post-surgical recurrence seems to be rare and it is not reported in literature.

Conclusion

Giant natal cleft nevus lipomatosus cutaneous superficialis is rare benign skin hamartoma with variable reported sizes in literature. Usually, there are two types of theses lesions, solitary and classic. These lesions are asymptomatic yet it is discomforting and causing psychological embarrassment. In most cases, no need for any further investigations. The main modality of treatment is surgical excision. After surgical excision, the excised mass should be sent for histopathological analysis, which is the main modality for diagnosis. Recurrences has not yet been noticed in our case as well as in reported literature cases.

REFERENCES

1. Takegawa M, Kakudo N, Morimoto N, et al. Giant nevus lipomatosus cutaneous superficialis on the buttock. Plast Reconstr Surg Glob Open. 2018; 21: 1918.
2. Leung AKC, Barankin B. Nevus lipomatosus superficialis on the left proximal arm. Case Rep Dermatol Med. 2017; 6908750.
3. Das D, Das A, Bandyopadhyay D, et al. Huge nevus lipomatosus cutaneous superficialis on back: an unusual presentation. Indian J Dermatol. 2015; 60: 296.
4. Bouchouicha S, et al. Giant nevus lipomatosus cutaneous superficialis. Presse Med. 2015.
5. Akoglu G, Dincer N, Metin A. Giant polypoid mass on thigh: a child with nevus lipomatosus cutaneous superficialis. An Bras Dermatol. 2016; 91: 554-555.
6. Pujani M, Choudhury M, Garg T, et al. Nevus lipomatosus superficialis: A rare cutaneous hamartoma. Indian Dermatol Online J. 2014; 5: 109-110.
7. Lima CDS, Issa MCA, Souza MB, et al. Nevus lipomatosus cutaneous superficialis. An Bras Dermatol. 2017; 92: 711.
8. Khandpur S, Nagpal SA, Chandra S, et al. Giant nevus lipomatosus cutaneous superficialis. Indian J Dermatol Venereol Leprol. 2009; 75: 407.