Case Report

A Giant Nevus Sebaceous Lesion in an 18 Year-Old Male: A Case Report

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ABSTRACT

A nevus sebaceous is a rare type of lesion that most often occurs on the scalp but can appear anywhere on the head, face, neck, forehead, or scalp. Nevus sebaceous is benign lesion usually resulting from hyperplasia of different elements of the skin such as epithelial, sebaceous, follicular elements. This article discusses a patient with giant nevus sebaceous lesions on his scalp and right ear. An 18-year-old man came to the Plastic Surgery Outpatient Department, Shiraz University of Medical Sciences, Shiraz, Iran with a large gray brown Nevus like lesions on his scalp and on the right periauricular region. Both lesions gradually increased in size over the time, leading to giant papillomatosis lesions. The patient had no manifestations like pain or other symptoms. The operation was planned, and lesions excised and repaired with Local Flap and Full thickness skin graft, the patient was discharged after a day. After surgery, recovery was good and after 3 months there was no relapse and cosmetic result was excellent. This article shows the importance of surgery role in nevus sebaceous patients and discusses different types of treatments.

KEYWORDS
Nevus Sebaceous; Skin Graft; Local Flap

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INTRODUCTION

Nevus sebaceous (NS) is a common lesion, with prevalence rate of 0.3% in newborns. It is a benign congenital lesion resulting from abnormalities of the skin elements like epidermis, sebaceous glands, and hair follicles. This Lesions are well-margin, hairless, yellow to brown color patch or plaque. During puberty because of sebaceous gland growth NS become more obvious. NS can appear anywhere in the human body mostly affecting scalp and face [1,2].

An important point about NS is that these lesions are predispose to secondary carcinoma. The most common carcinoma occurring in these lesions is Trichoblastoma, followed by syringocystadenoma papilliferum. Tricholemmoma, sebaceous adenoma, desmoplastic tricholemmoma, apocrine adenoma, and poroma can also occur in these lesions [3-6].

After diagnosing NS, we have to treat these lesions, but there is some controversy about treatment of these lesions with options of observation,

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medical therapy and also to surgical excision [7,8]. We present a patient with NS on scalp and right ear that underwent surgical excision.

CASE PRESENTATION

This study was done in May 2023 at Rajaee Hospital in Shiraz, Iran. An 18 -year-old male came to our Outpatient Department with a large gray brown Nevus like lesions on his scalp and right ear (Figure 1). Both lesions gradually increased in size over the time, leading to giant papillomatosis lesions. Physical examination revealed a linear lesion consisting of pigmented papules, with a verrucous appearance and no well definite borders. The patient had no past medical history about trauma to the site and any infectious diseases. The patient had no manifestations like pain or other symptoms.

Routine physical examination of the patient was normal without any abnormalities. Otoscope examination did not represent any problem, and his hearing was normal in both ears. Local examination demonstrates a large gray brown nevus like lesions on scalp and right ear that was no tender and no pulsatile. There was no evidence of ulcer, exudation or any secretion. Lab tests were all in normal range.
The surgery was planned. Elliptical incision was used, and the scalp lesion (4 × 2.5 × 1 cm) was completely excised and primarily repaired. Right ear lesion (6.5 × 5 × 2 cm) was excised and the defect repaired with local advancement flap and full thickness skin graft that was harvested from abdoman. Tie over dressing was applied (Figure 2).
After the surgical excision, patient was discharged another day with good health condition. The postoperative care was done and we did not have

Figure 1: An 18-year-old boy with a Nevus like lesions on his scalp and right periauricular regions.

Figure 2: Right ear lesion was excised and the defect repaired with local advancement flap and full thickness skin graft.

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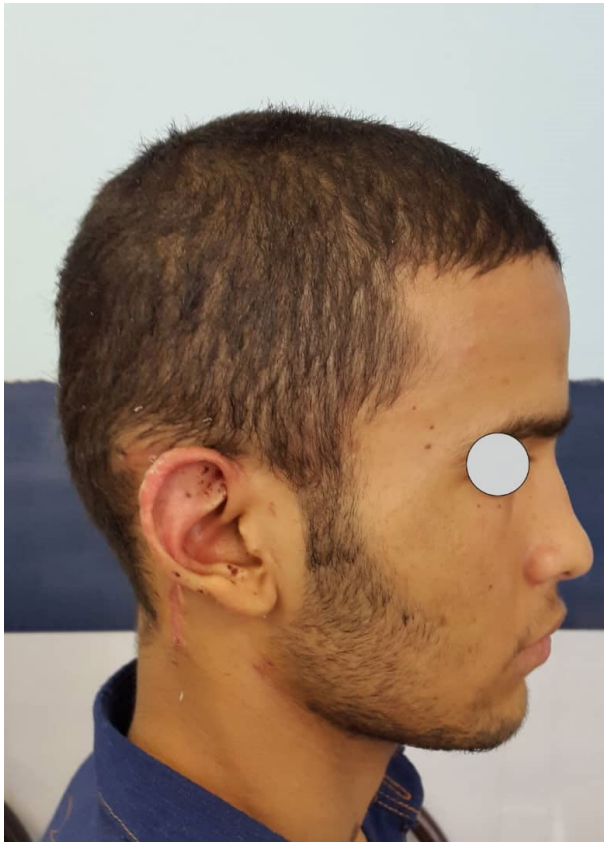

Figure 3: The patient is shown 3 months postoperatively.

any complication in this period, and the follow-up period was uneventful up to 3 months. There was no relapse and cosmetic result was excellent (Figure 3).

ETHICAL APPROVAL

Informed consent was obtained from this patient before the surgery and all the treatments explained to the patient in a simple manner. All the procedures performed in this patient were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

DISCUSSION

NS is a benign dermal lesion consist of skin elements especially epidermal layer of skin so it is classified as epidermal nevus.it also can originate from hair follicle tumor. This lesion can include all the components of skin so; it is also called an organoid nevus [1,2]. On physical examination NS usually present as hair-less plaques, with a formless shape, and yellowish-brown color, with a verrucous or papillomatosis appearance [9-11].

In patients with aesthetic or functional problems we have to choose the best treatment, usually done by full-thickness excision and then reconstruct the defect by primary closure, local flaps and maybe skin graft [12,13]. Most plastic surgeons recommend to excise these lesions in childhood. [3]

In addition to the excision, we can use other methods for treating NS, such as curettage, cauterization, cryotherapy, photodynamic therapy, topical salicylic acid, topical and systemic retinoids, topical application of vitamin D analog, laser treatment, and dermabrasion [3,9,13,15].

CONCLUSION

NS lesion and different treatments declared in this article. The role of surgey is known for NS patients but treatment of these lesions is still challenging. Different local flaps and skin graft is helpful for reconstruction of this patients. Moreover, still there is no consensus on the treatment of choice for nevus sebaceous, surgical removal is often reported as most effective method, considering the aesthetic and functional aspects of the patient.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interests.

REFERENCES

1. Fathaddin A, Almukhadeb E. A Rare Occurrence of Sebaceous Carcinoma, Sebaceoma, Syringocystadenoma Papilliferum, and Trichoblastoma in a Single Nevus Sebaceous Lesion. *Case Rep Dermatol* 2021 Jun 8;**13**(2):271-277. doi: 10.1159/000516351. PMID: 34177517; PMCID: PMC8215995.
2. Baigrie D, Troxell T, Cook C. Nevus Sebaceus. 2020 Nov 20. In: StatPearls [Internet]. Treasure Island (FL): *StatPearls Publishing* 2021 Jan–. PMID: 29494100.

[DOI: 10.61186/wjps.13.1.92]

3. Wali GN, Felton SJ, McPherson T. Management of naevus sebaceous: a national survey of UK dermatologists and plastic surgeons. *Clin Exp Dermatol* 2018 Jul;**43**(5):589-591.
4. El Ezzi O, de Buys Roessingh AS, Bigorre M, Captier G. Syndromic sebaceous nevus: current findings. *Int J Dermatol* 2018 May;**57**(5):599-604.
5. Lihua J, Feng G, Shanshan M, Jialu X, Kewen J. Somatic KRAS mutation in an infant with linear nevus sebaceous syndrome associated with lymphatic malformations: A case report and literature review. *Medicine (Baltimore)* 2017 Nov;**96**(47):e8016.
6. Gu AK, Zhang XJ, Zhang LT, Ma FK. Nevus Sebaceous at an Unusual Location: A Rare Presentation. *Chin Med J (Engl)* 2017 Dec 05;**130**(23):2897-2898.
7. Garcias-Ladaria J, Cuadrado Rosón M, Pascual-López M. Epidermal Nevi and Related Syndromes - Part 2: Nevi Derived from Adnexal Structures. *Actas Dermosifiliogr (Engl Ed)* 2018 Oct;**109**(8):687-698.
8. Lobato-Berezo A, Aguilera-Peiró P, Pujol-Vallverdú RM. Tumor Collision Over Sebaceous Nevus: Clues for Dermoscopic Diagnosis. *Actas Dermosifiliogr (Engl Ed)* 2018 Sep;**109**(7):647-648.
9. Dwiyana RF, Hazari MN, Diana IA, Gondokaryono SP , Effendi R.M.R.A , Gunawan H. Schimmelpenning syndrome with large nevus sebaceous and multiple epidermal nevi *Case Rep Dermatol* (2020) ;12 pp. 186-191.
10. Meireles A, Pereira M, Costa MJ. Nevo Sebáceo de Jadassohn em Recém-Nascido [Nevus Sebaceous of Jadassohn in the Newborn] *Acta Med Port*, **33** (2020), p. 288.
11. Almeida C, D'acri A. *Oncologia Cutânea* (2017) ;**1** pp. 68-69.
12. Kang S, Amagi M, Bruckner AL, Enk AH, Margolis DJ, McMichael A.. *Fitzpatrick's dermatology (9th ed.), McGraw-Hill Education, New York* (2019).
13. Bezugly A, Sedova T, Belkov P, Enikeev D, Voloshin R. Nevus sebaceus of Jadassohn — high frequency ultrasound imaging and videodermoscopy examination. *Case presentation Med Pharm Rep* (2021) ;**94** pp. 112-117.
14. Osman MAR, Kassab AN. Carbon dioxide laser versus erbium: YAG laser in treatment of epidermal verrucous nevus: a comparative randomized clinical study *J Dermatolog Treat* (2017);**28** pp. 452-457.

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