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CASE REPORT

Squamous cell carcinoma arising from a sebaceous cyst

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Abstract

Development of squamous cell carcinoma from a sebaceous cyst is uncommon. In this report, we describe a 77-old female patient who had a sebaceous cyst for 20 years. The cyst started to grow during the last year. The patient underwent an operation for excision biopsy, and the diagnosis was squamous cell carcinoma.

Key Words: Squamous cell carcinoma; Sebaceous cyst

Introduction

Sebaceous cyst is one of the most common skin lesions (1). This skin lesion, usually 1-4 cm in diameter, can occur in all age groups (2). The neck, the head, and the face are the most common sites for this cyst. However, the lesion has also been observed on the trunk and lumbar (3, 4). The development of this cyst into malignancy occurs more frequently in males, and the average age of growth is about 43. Although a clear factor is not determined for it, excessive exposure to sunlight, chronic irritation, and human papillomavirus infection are proposed as associated contributors (5, 6). Transformation of the sebaceous cyst into malignant cells is rare, but among these cells, subcutaneous cell carcinoma is more common than basal cell carcinoma (7). This case report describes a woman who had sebaceous cyst for 20 years, and now it has transformed to squamous cell carcinoma.

Cases

The patient is a 77-year-old woman who suffers from diabetes and has underwent coronary artery by-pass graft surgery. She has had a sebaceous cyst for 20 years; however, the cyst started to grow during the last year. She mentioned that the cyst had become itchy, the skin had got thin, and a watery discharge oozed out after scratching the area. After 15 days the discharge went septic. 2. It took the same period of time for the patient to refer to the doctor, and after 3 days, the infection got foul. The doctor requested a chest x- ray and an abdominal sonogram, a CT-scan and an examination for probable metastasis. Fortunately, the cyst had not developed a metastasis. Nevertheless, the result of the examination showed an increase in the white blood cell count (11.3), but there were reductions in red blood cell count (3.84), hemoglobin (10.1), hematocrit (32.6), and MCHC (31). The patient underwent an operation for excision biopsy (Figure 1).

The diagnosis was squamous cell carcinoma. After 5 days, the patient was operated on again for excision of all the cancerous tissues. Afterwards, in order to continue the treatment, the patient was referred to the radiotherapy department (Figure 2).

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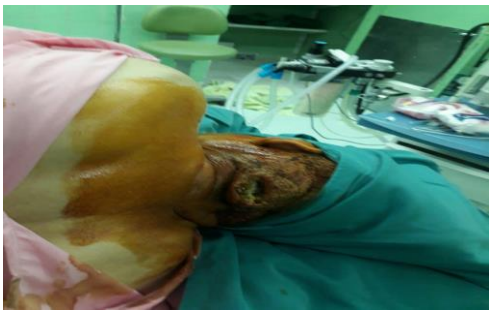

Figure 1: A large squamous cell carcinoma on the neck (preoperative)

Figure 2: The tumor removed (postoperative)

Discussion

Sebaceous cysts and squamous cell carcinoma are among the most common skin lesions. In the United States, 700.000 cases of squamous cell carcinoma are discovered annually (8). However, the development of squamous cell carcinoma from a sebaceous cyst is not very common. According to available data, the rate of squamous cell carcinoma arising from sebaceous cyst is from 0.011 to 0.045% (4,9,10). The lesion is not usually reported on the trunk and lumbar area, but the neck and the head with 42.1% are the most common sites of this cyst. Also, according to information metastases have been reported in 3 cases of the aggressive disease and death within 5 to 10 months (11).

Development of squamous cell carcinoma from a sebaceous cyst is more common than the development of basal cell carcinoma. The growth of this tumor is slow and the term of this lesion is reported from 2 to 480 months. In our case, the term was 240 months, the size of lesion was reported from 1.5 to 13 cm. The size was 8 cm in our case (1).

The related risk factors for this lesion are prolonged exposure to sunlight, chronic irritation, and human papillomavirus infection. In our case, the patient had infection. The method of the treatment for squamous cell carcinoma arising from a sebaceous cyst is identical, and it is safety excised. The safe removal for this lesion is an excision of 4 mm by 6 mm for high risk squamous cell carcinoma. After the operation, we referred the patient for the follow-up treatment to radiotherapy. It is clear we needed to make sure the tumor has completely vanished.

Conclusions

Despite the fact that squamous cell carcinoma arising from sebaceous cyst is rare, according to our experience, it is potential that malignancy can occur in patients with chronic sebaceous cyst if they are exposed to sunlight. Thus, for accurate diagnosis, biopsy and microscopic examination are necessary.

References

1. Anastasios KV, Alexandra G, Anthony K, Efthimios S. Malignant Transformation in a Typical Epidermal Cutaneous Cyst. J Med Cases. 2012;3(4):254-6.
2. Ziadi S, Trimeche M, Hammedi F, Sriha B, Jomaa W, Mokni M, et al. Squamous cell carcinoma arising from an epidermal inclusion cyst: A case report. N Am J Med Sci. 2010 Jan;2(1):46-7.
3. Bhatt V, Evans M, Malins TJ. Squamous cell carcinoma arising in the lining of an epidermoid cyst within the sublingual gland--a case report. Br J Oral Maxillofac Surg. 2008 Dec;46(8):683-5. doi: 10.1016/j.bjoms.2008.03.006.
4. Cameron DS, Hilsinger RL Jr. Squamous cell carcinoma in an epidermal inclusion cyst: case report. Otolaryngol Head Neck Surg. 2003 Jul;129(1):141-3. DOI: 10.1016/S0194-59980300466-2
5. Evans HL. Low-grade fibromyxoid sarcoma: a report of 12 cases. Am J Surg Pathol. 1993 Jun;17(6):595-600.
6. Indap S, Dasgupta M, Chakrabarti N, Agarwal A. Low grade fibromyxoid sarcoma (Evans tumour) of the arm. Indian J Plast Surg 2014 May-Aug; 47(2): 259–262. doi: 10.4103/0970-0358.138973
7. Lin CY, Jwo SC. Squamous Cell Carcinoma Arising in an Epidermal Inclusion Cyst. (Chang Gung Med J 2002 Apr;25(4):279-82.
8. Karia PS, Han J, Schmults CD. Cutaneous squamous cell carcinoma: estimated incidence of disease, nodal metastasis, and deaths from disease in the United States, 2012. J Am Acad Dermatol. 2013 Jun;68(6):957-66. doi: 10.1016/j.jaad.2012.11.037.
9. Anton-Badiola I, San Miguel-Fraile P, Peteiro-Cancelo A, Ortiz-Rey JA. [Squamous cell carcinoma arising on an epidermal inclusion cyst: a case presentation and review of the literature]. Actas Dermosifiliogr. 2010 May;101(4):349-53. [Spanish]
10. Chiu MY, Ho ST. Squamous cell carcinoma arising from an epidermal cyst. Hong Kong Med J. 2007 Dec;13(6):482-4.
11. Tokunaga M, Toya M, Endo Y, Fujisawa A, Tanioka M, Kato M, et al. A Case of an Undifferentiated Squamous Cell Carcinoma Arising from an Epidermal Cyst. Case Rep Dermatol Med. 2013; 2013: 469516.