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A rare case of spiradenoma or a common sebaceous cyst? - A case study

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Abstract

Spiradenoma is a rare and adnexal skin tumor of the sweat gland appearing equally frequently in both female and male patients. When having a patient with a solitary, nodule occurring on a scalp, a spiradenoma diagnosis should be considered. However, it always ought be differentiated with more common skin lesions e.g. sebaceous cyst. This case report presents a 36 year old male presented with a solitary 1,5 centimeter in diameter mass on the scalp of the left temporal region. The patient underwent an ultrasound and excision biopsy which revealed spiradenoma diagnosis. This tumor transforms into malignant form extremely rarely. However, transformation is more likely in elderly patients having a long-standing lesions This is why early and wide excision is crucial and considered to be a gold standard treatment.

Conclusion

When having a patient with a solitary, nodule occurring on a scalp, a spiradenoma diagnosis should be considered. However, it always ought be differentiated with more common skin lesions e.g. sebaceous cyst. Early diagnosis and excision are gold standard when dealing with most skin lesions. A long term follow-up is required because of potential risk of malignant transformation.

Introduction

A sebaceous cyst is also termed as an epidermoid cyst. This skin lesion is common, slow-growing, painless and most commonly solitary located on the face, neck and trunk, however they can be located elsewhere [1]. Although it appears most commonly in adulthood, it can be present at any age [4]. Histopathological examination reveals encapsulated subepidermal nodules which store keratin. In the ultrasound examination, this structure is round to oval well-circumscribed, without blood or lymphatic vessels. Usually, these cyst are recognized as benign lesions, however rare malignancy can arise. According to Zito et al. approximately 1% transforms to squamous or basal cell carcinoma.

Spiradenomas historically have been described as sweat gland tumors, nowadays is known as an uncommon benign adnexal tumor [2]. Although it can occur at any age, most commonly it appears in young adults from 15 to 35 years of age [7]. Usually presents as a single, painful and rounded skin tumor. Painful sensations are observed in around 91% of cases [14]. In most cases is slow growing and appears bluish, pink, grey or purple hue in color [5, 10]. Malignant transformation is very rare, however if diagnosed, the skin lesion grows rapidly [3]. Due to low availability of data concerning low grade malignant eccrine spiradenomas, its biologic behavior is poorly understood [6]. The latest data suggest that spiradenomas are caused by defective tumor suppressor gene - CYLD gene on chromosome 16 which is also found in Brooke-Spiegler syndrome [13].

Case report

A 36 year old male presented with a solitary mass on the scalp of the left temporal region. Family history and past medical history were insignificant. The skin change was noticed several years ago and started increasing in size one year ago. Family and past medical history were insignificant. During the physical examination, a 1,5 centimeter in diameter mass was discovered. This skin lesion was round in shape and of pink color. General practitioner referred the patient for an ultrasound examination, which revealed characteristics suggesting sebaceous cyst diagnosis. Afterwards, the patient was referred for excision biopsy in local anesthesia. The first biopsy contained a skin fragment 2,2 x 1,2 centimeter in size with 0,5

centimeter of subcutaneous tissue. Its surface was covered with a 1,4 centimeter tumor. The pathology examination presented spiradenoma in lateral and deep incision lines. On the basis of the diagnosis, the patient was qualified for radicalization and wide excision with 1 centimeter margin. The second biopsy consisted of skin fragment 3,5 x 1, 2 centimeter in size containing a 1,5 centimeter surface scar with a 1,4 centimeter wide healthy tissue margins. The final pathology confirmed spiradenoma diagnosis, additionally a connective tissue scars and foci of resorption were detected. During the 3 months follow up period no recurrence or healing defects were detected, currently the follow up process is ongoing.

Discussion

Spiradenoma is a rare and adnexal skin tumor of the sweat gland appearing equally frequently in both female and male patients. Although it can be detected at any age, it is most common in young adult population. It is possible for spiradenoma to appear along with cylindroma, trichoepitheloma and it increases occurrence of Brooke-Spiegler syndrome [8]. When suspecting a spiradenoma diagnosis, it is important to differentiate it with the following: anaplastic or basal cell carcinoma, adenocarcinoma or sebaceous cyst [9]. This tumor transforms into malignant form extremely rarely. However, transformation is more likely in elderly patients having a long-standing lesions [10]. This is why early and wide excision is crucial and considered to be a gold standard treatment [11, 15]. Hence, as Kanwaljeet S et al. suggest early diagnosis is a basic step in prevention and treatment. In case of positive margins or node - positive diseases, adjuvant radiation therapy can be considered. It is important to bare in mind that its role is not entirely defined yet [15].

Due to the fact that clinically both sebaceous cyst and spiradenoma are similar, the only distinguishing method is an excision biopsy followed by a pathology examination. In order to confirm spiradenoma diagnosis it is crucial to distinguish certain cells. „Microscopically, the tumor is composed of two types of cells in a well - delineated nodular pattern: larger, paler cells grouping around the lumina and smaller darker cells forming the periphery of the tumor.” [3].

Conclusion

When having a patient with a solitary, nodule occurring on a scalp, a spiradenoma diagnosis should be considered. However, it always ought be differentiated with more common skin lesions e.g. sebaceous cyst. Early diagnosis and excision are gold standard when dealing with

most skin lesions. A long term follow-up is required because of potential risk of malignant transformation.

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