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Report on a case of cutaneous lymphoma presenting as inflamed cyst

Relazione su un caso di linfoma cutaneo mascherato da cisti infiammata

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Summary

Cutaneous cysts are frequently observed in medical practice. They are commonly of sebaceous origin and can be easily treated. However, at times their appearance is fallacious because they hide more serious illnesses. This case, in fact, deals with an inflamed "sebaceous cyst" of the axilla that was removed due to its resistance to medical treatment. Histology showed the presence of a T-cell lymphoma. The patient underwent a complete check-up that fortunately ruled out dissemination. He will now undergo regular haematologic follow-up in order to observe the evolution of the lymphoma. Eur. J. Oncol., 13 (1), 47-49, 2008

Key words: **cutaneous cyst, cutaneous T-cell lymphoma, sebaceous cyst**

Riassunto

Le cisti cutanee sono di frequente riscontro nella pratica medica. Sono generalmente di origine sebacea e facilmente trattate. A volte, tuttavia, il loro aspetto è ingannevole perché nascondono patologie più gravi. Questo caso, infatti, riguarda una "cisti sebacea" infiammata dell'ascella, rimossa a causa della resistenza alla terapia medica. L' esame istologico ha mostrato la presenza di un linfoma a cellule T. Il paziente è stato sottoposto ad un *check-up* completo che fortunatamente ha escluso una disseminazione. Sarà sottoposto ad un *follow-up* ematologico regolare per seguire l'evoluzione del linfoma. Eur. J. Oncol., 13 (1), 47-49, 2008

Parole chiave: **cisti cutanea, linfoma cutaneo a cellule T, cisti sebacea**

Introduction

Cutaneous cysts are frequently encountered in everyday medical practice and a great number of them consist of so-called sebaceous cysts. Reassurance or removal in a minor surgery setting is the usual management. However at times these straightforward lesions may hide potentially severe illnesses.

We report the case of a suspected inflamed sebaceous cyst of the axilla that turned out to be a cutaneous T-cell lymphoma.

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Case report

The patient is a 75 year-old male with past medical history of ischaemic heart disease, arrhythmia, hypertension, psoriasis, urinary lithiasis. Past surgical history was significant for the removal of a "fatty cyst" from his right axilla 40 years earlier and wedge resection of the left lung for benign disease some 20 years before. He had been complaining of a painful reddish nodule on his left axilla since mid-May 2007, when he was prescribed oral antibiotics for an inflamed sebaceous cyst by his general practitioner. Due to the persistence of symptoms, he referred again to his physician who ordered an ultrasound scan. This showed a superficial spheroid lesion compatible with an infected cyst or a lymph node. He was given i.m. antibiotics for one week with mild improvement of the discomfort. Surgical evaluation was thus required. On initial assessment the patient appeared in good health and complained of a circumscribed 3 cm wide protruding soft lump covered by painful reddened skin for a width of about 2 cm around the lesion on his left axilla. The protruding and very superficial position of the lesion recalled a cutaneous cyst rather than an enlarged lymph node or subcutaneous nodule. Surgical treatment was proposed. On June 1st 2007 surgical excision of the lesion was performed for diagnostic and therapeutic reasons. A typical skin ellipse was obtained and a radical excision was performed. The wound was sutured with subcutaneous 2/0 running suture of Polyglactin and 3/0 polypropylene running intradermal suture for the skin. The post-operative course was regular, the suture was removed on the 9th post-operative day. At that time the scar still showed mild circumferential painless erythema.

The pathological report was surprising. In fact microscopy showed wide infiltration of the dermis by a rich proliferation of average size T lymphoid cells amidst numerous granulocytes and a few B lymphocytes. Such findings were consistent with chronic lymphatic proliferation of T cells. Haematological evaluation ensued. The patient underwent a complete laboratory check-up, whole-body CT scan, PET scan and bone marrow biopsy that showed no anomalies. He will now undergo regular follow-up checks by his haematologist. Surgical inspection of the scar on October 1st showed perfect healing of the incision and complete disappearance of the erythema.

Discussion

Cutaneous nodules constitute a frequent observation in the routine practice of physicians. They often affect healthy individuals especially on hair-bearing surfaces presenting with so-called "sebaceous cysts". As a matter of fact true sebaceous cysts are very rare. Epidermal cysts are more common and constitute dermal inclusion cysts brought about by prior trauma. They are filled with macerated keratin and result from implantation of epidermis or the epithelial lining of pilo-sebaceous follicles. Tricholemmal or pilar cysts are usual findings on the scalp. They derive from hair follicles, are often multiple and occur on a familial basis or even as a result of autosomal genetic dominance. Effective treatment of a cyst of any type has long been sought as shown by an account by Sir Astley Cooper of the removal of a sebaceous cyst from the scalp of King George IV in 1820: "*I made an incision in the scalp, and upon the side on which I stood, which was about three-fourths of its size, I with difficulty detached it from the skin… The edges of the wound were brought together and lint and plaster applied. The King bore the operation well*"[1].

All that is needed in their management is reassurance, or removal in a minor surgery setting. When infection occurs, prompt surgical drainage under local anaesthesia is successful. Antibiotics are needed only in cases of surrounding cellulitis. Definitive excision of the cyst is preferable in the absence of any infection thus allowing for a less painful procedure and better cosmetic results[2].

It is usually recommended to send the specimen for histological examination as even the "humble sebaceous cyst" may hide an unsuspected skin tumour of the squamous type, cylindroma or other rarity[1].

Among important rarities cutaneous lymphomas are to be mentioned, and among these cutaneous T-cell lymphomas (CTCL) show increasing incidence, presumably due to pollution and exposure to irritating factors[3]. As with other types of lymphoma, they have long posed difficulties as pertains to the meaning of histologic classification with regards to practical treatment.

Recently two "giants" in the health field, the World Health Organization (WHO) and the European Organization for Research and Treatment of Cancer (EORTC) have jointly developed a common classification that will prevent patients receiving heavy treatments for low-grade tumours. Cutaneous lymphomas have been subdivided in T-cell lymphomas (e.g. *mycosis fungoides*, panniculitis-like T-cell lymphomas, CD30+ lymphoproliferative disorders), B-cell lymphomas (e.g. marginal zone B-cell lymphoma, follicular centre lymphoma, large

B-cell lymphoma) and CD4+/CD56+ haematodermic neoplasm, a precursor tumour formerly known as blastic NK-cell lymphoma[4]. An excellent prognosis is anticipated with T1 stage and with CD 30+ large T-cell lymphomas or lymphomatoid papulosis. On the contrary, T3/T4 stage and CD 30- large T-cell lymphomas have an aggressive clinical behaviour[5].

The global scenario of CTCLs is worrisome due to a significant impact on patients' lives in terms of their overall wellbeing. Even the mildest forms imply the persistent presence of skin redness and cutaneous discomfort that adversely impact patients' daily activities[6].

Our patient represents the typical setting of an important diagnostic surprise in the face of a trivial illness. He showed a visible painful and itchy lump on his left axilla surrounded by reddened skin. A common infected cutaneous cyst was suspected and subjected to well known antibiotic treatment. However, due to the persistence of the lesion, surgical excision and histologic examination were performed, rather than simple incision and drainage, due to the following considerations. The lesion as well as the surrounding erythema showed no response to maximal antibiotic treatment (per os then i.m.). Furthermore, spontaneous and evoked pain was not severe as is typical of skin abscesses. Finally, histology was regarded as mandatory to rule out skin cancer. Excision permitted a solution to the problem and more importantly was followed by microscopic examination. The pathology report discovered a presumably low-aggressive infiltrating proliferation of average size T-cells that proved to be CD30-, CD4-, CD3+, CD8+, CD5+/-. Such findings were not ascribable to a *mycosis fungoides* due to the absence of the classical Pautrier micro-abscesses, or to a Sezary's syndrome where one would expect the presence of Sezary cells or Lutzner variants.

The patient has undergone thorough haematological evaluation, including laboratory examinations, whole body CT, PET scan, and bone marrow biopsy, that have ruled out any other lesion from lymphocytic proliferation. He should now undergo regular haematological follow-up checks in order to detect any recurrence of the lymphoma.

We believe that our case deserves attention because it will hopefully constitute a "warning flag" on a trivial but very frequent finding such as an inflamed "sebaceous cyst". In fact, in the period November 1st 2000 - October 31st 2007 we have estimated a total number of some 700 cutaneous cysts treated on an outpatient basis; we usually excise an average of 70 cysts and drain an average of 25 suppurating cysts every year.

This was the first time a lymphoma was discovered thanks to a combination of two simple acts that we believe ought to be undertaken in the presence of a clinical scenario such as this: radical excision followed by a common microscopic examination of a "humble sebaceous cyst" that did not respond to traditional treatment administered over a 2 week period.

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