PanAfrican Medical Journal

Open Access

Case report

Axillary apocrine carcinoma skin: report of a case

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Key words: Apocrine carcinoma, child, axillary, skin

Received: 05/10/2015 - Accepted: 10/04/2016 - Published: 28/04/2016

Abstract

The cutaneous apocrine carcinomas are malignant tumors rare adnexal, slowly and preferably located in the axillary growth. A girl aged 24 with no particular medical history was addressed to a right axillary mass slowly evolving for two years, associated with pain in the right upper limb. The echo mammogram had shown a mass in the axilla and supraclavicular and axillary MRI had objectified mass axillary measuring 171mm. Pathological examination with immunostaining was in favor of apocrine carcinoma. The cutaneous apocrine carcinomas are well-known in the mammary glands, but it is difficult to morphologically distinguish between breast cancer and apocrine carcinoma.

Pan African Medical Journal. 2016; 23:253 doi:10.11604/pamj.2016.23.253.8121

This article is available online at: http://www.panafrican-med-journal.com/content/article/23/253/full/

Introduction

The cutaneous apocrine carcinoma is a rare malignant adnexal tumor. They are located preferentially in the axilla. It is difficult to differentiate between cutaneous apocrine carcinoma and cutaneous metastases of mammary adenocarcinomas particular. The prognosis is often marked by a risk of local recurrence and metastatic. We report the case of axillary apocrine carcinoma skin in a girl aged 24.

Patient and observation

This is a girl aged 24, without specific medical history, which arose in consultation for a right axillary mass gradually increasing volume for two years without inflammatory signs operating in a context of conservation general condition. Physical examination revealed a hard mass axillary measuring about 12 cm, attached to the deep plane (Figure 1), associated with muscle weakness throughout the right upper limb and a deficit of the radial nerve realizing the hand drooping appearance. Additional tests in search of the original has been made, a Mammo-ultrasound found a mass the axilla without significant abnormality of both breasts, Axillary MRI objectified a heterogeneous mass right axillary irregular contours measuring 171/88/115 mm embracing and delivering the right axillary artery. Thoraco-abdominal pelvic CT showed no secondary locations. Histological study with immunohistochemistry on biopsy of the mass was in favor of apocrine carcinoma: tumor cells expressed CK7 and CK20 weakly. CD138, CD30, CD3, Melan A, hormone receptors and Hercep Test were negative. The first surgery could not be performed given the involvement of the axillary pedicle. The patient was put on chemotherapy FEC 100. A breast MRI scan done after 6 cycles of chemotherapy objectified axillary mass measuring 161/90 mm coming in contact with the right axillary pedicle remained permeable. Surgery was discussed at this stage but challenged seen the intimate contact of the tumor mass with large axillary vessels. The patient was then put under a kind Weekly Docetaxel chemotherapy at a dose of 24mg / m^2 / week.

CONSENT: Written informed consent was obtained from the patient's legal guardians for publication of this case report and any accompanying images. A copy of the written consent is available of review by the editor in chief of this journal.

Discussion

The primary cutaneous apocrine carcinomas are rare malignant adnexal tumors, which grow in zones rich cutaneous apocrine glands, especially the armpit and the vulva [1]. They occur most often in the form of nodules or plaques hillocky [2, 3]. In the literature a hundred cases of cutaneous apocrine carcinomas are reported, mainly located at axillary level [4, 5] (Table 1). The cutaneous apocrine carcinoma poses a problem of differential diagnosis with cutaneous metastases of mammary lobular carcinoma [6, 7], this difficulty has been highlighted with identification of a number of clinical and histological criteria for the orientation of diagnosis [8] (Table 2). The standard treatment is based on surgery that must be wide with 2-3cm margins [1]. Ogata et al. [6] reported a dissection associated with the initial surgery in all patients, returning positive in 89% of cases, suggesting that prophylactic lymph node surgery may improve the prognosis. Thus in absence of any clinical nodal a cleaning must be given in accordance with the size of the lesion, degree of histological differentiation and the presence or absence of vascular invasion. Regarding adjuvant therapy, the benefit to radiotherapy or chemotherapy is not yet established; our patient had a partial response of less than 25% FEC100 type of chemotherapy without allowing a cancer surgery. But radiotherapy seems to find its indication in cases where a cancer surgery could not be performed due to the anatomical location of the lesion. We have not been able to radiotherapy given the volume of the tumor mass, the lack of published data on tumor response and the dose of 54 Gy critical for brachial plexus underlying. The evolution is usually marked by a loco regional recurrence or metastatic few years after the initial treatment may cause death [2], according Paties et al. [3] among the six patients followed for 2 to 10 years for cutaneous apocrine carcinoma, recurrence was detected in 3 patients whom died. Robson et al. [4] that followed 17 patients between 9 months and 9 years reported a local or metastatic recurrence in 47% of cases and 4 patients died of their disease.

Conclusion

Cutaneous apocrine carcinomas are rare tumors commonly located at axillary level. Give the absence of data on the effectiveness of chemotherapy and radiotherapy, surgery alone a cure. Our case illustrates the care difficulties of this type of tumor when the diagnosis is late and suggests that early diagnosis improves the prognosis.

Competing interests

The authors declare competing interest.

Authors' contributions

All the authors read, corrected, and approved the final manuscript.

Acknowledgements

This study was supported by the department of radiotherapy, IBN ROCHD university hospital.

Tables and figure

Table 1: Review of cases and cutaneous apocrine carcinoma developments since 1951
Table 2: Differential diagnosis of cutaneous apocrine carcinoma between criteria and mammary adenocarcinoma metastasis
Figure 1: Axillary mass right firm, painless and fixed measuring 12 cm long axis

References

1. Maury G , Guillot B, BessisD, Cribier B, Girard C. Carcinome apocrine cutané axillaire inhabituel: difficultés diagnostiques histologiques. Annales de dermatologie et de vénéréologie. 2010;137(8-9):555-559.**PubMed** | **Google Scholar**

2. Shintaku M, Tsuta K, Yoshida H, Tsubura A, Nakashima Y, Noda K. Apocrine adenocarcinoma of the eyelid with aggressive biological behavior: report of a case. Pathol Int. 2002;52(2):169-73. **PubMed** | **Google Scholar**

3. Carlo Paties, Luca Taccagni G, Mauro Papotti, S Guido Valenfe, Adriano Zangrandi and Filippo Aloi. Apocrine carcinoma of the skin: clinicopathologic, immunocytochemical, and ultrastructural study. Cancer. 1993; 71(2): 375-381. **PubMed** | **Google Scholar**

4. Robson A, Lazar AJ, Ben Nagi J et al. Primary cutaneous apocrine carcinoma. Am J Surg Pathol. 2008;32(5):682-690. **PubMed** | **Google Scholar**

5. Chamberlain RS, Huber K,White JC, Travaglino-Parda R. Apocrine gland carcinoma of the axilla: review of the literature and recommendations for treatment. Am J Clin Oncol. 1999;22(2):131-13. **PubMed** |**Google Scholar**

6. Ogata D, Kiyohara Y, Yoshikawa S, Kasami M. Treatment strategy for cutaneous apocrine carcinoma. Int J Clin Oncol. 2014;19(4):712-715. **PubMed** | **Google Scholar**

7. Vasilakaki T, Skafida E, Moustou E, Grammatoglou X, Arkoumani E, Koulia K, Tsavari A, Delliou E. Primary cutaneous apocrinoma of sweats glands: a rare case report. Case rep oncol. 2011;4(3): 597-601. **PubMed**| **Google Scholar**

8. Zelger BG, Stelzmueller I, Dunst KM, Zelger B. Solid apocrine carcinoma of the skin: report of a rare adnexal neoplasm mimicking lobular breast carcinoma. J Cutan Pathol. 2008; 35(3) :332-336. **PubMed** | **Google Scholar**

Table 1: review of cases and cutaneous apocrine carcinoma developments since 1951

Sites	**axillaire**	**Cuir chevelu**	**paupière**	**tronc**	**Region péri anale**	**Vulve**	**Mamelon**	**Poignet, front, bras, cou, doigt, lèvre, oreille**	**total**
Nombre de cas	39	7	5	2	1	3	2	7	66
Récidive locale	6	1	0	1	0	0	0	4	12
Récidive ganglionnaire	11	3	3	1	0	0	1	3	23
Metastases	7	1	2	0	0	1	1	0	12
Décès dû au CAC	4	1	0	1	0	1	1	1	9

Table 2: differential diagnosis of cutaneous apocrine carcinoma between criteria and mammary adenocarcinoma metastasis		
Similarities et différences	**Carcinoma apocrine cutané**	**Adénocarcinome mammaire métastatique**
Clinique:		
Sexe	H>F	F+++
Âge	20 à 40 ans	40 à 50 ans
Topographie	Aisselle, cuir chevelu et visage	Sein+++ aisselle
lesion primitive	Plaque sous cutané, nodule	Masse intramammaire
métastase ganglionnaire	Rares	Fréquentes
métastases à distance	Rares	Fréquentes
pronostic	Excellent si exérèse complète	Variable selon degree tumoral
Histology:		
localization	Derme, hypoderme	Sein, tissue mammaire ectopique
architecture	Lobules de petites cellules avec des colonnes ou bandes ou cellules isolées	Structures glandulaires massives peu différenciées, cellules en files indiennes, vacuoles intracytoplasmiques
destruction	Derme, structures annexielles, nerfs, hypoderme	Tissu mammaire
atypies, mitoses, nécrose	Rares	Variables
invasion vasculaire lymphatique	Non décrite	Possible
récépteurs oestrogènes progestatifs	Positifs	Positifs
expression CK	CK7+, CK20+/-	CK7+, CK20-
H : homme, F : femme, CK : cytokératine		

Figure 1: Axillary mass right firm, painless and fixed measuring 12 cm long axis