



Available online at
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com

HandSurgery
& Rehabilitation

Hand Surgery and Rehabilitation xxx (2016) xxx–xxx

Recent advance

Five cases of acrometastasis to the hand from a carcinoma and review of the literature

Acrométastases de la main à partir d'un carcinome : série de 5 cas et revue de la littérature

E. Muñoz-Mahamud*, A. Combalia, A. Carreño, J.M. Arandes

Department of Orthopedic Surgery and Traumatology, Hospital Clínic and Department of Human Anatomy and Embryology – Institut d'Investigació August Pi i Sunyer IDIBAPS, Faculty of Medicine, University of Barcelona, Carrer Villarroel 170, 08036 Barcelona, Spain

Received 28 July 2016; received in revised form 3 October 2016; accepted 10 October 2016

Abstract

Metastases in the hand bones are a rare form of cancer presentation. Their appearance as a sign of carcinoma is even rarer and is associated with a poor prognosis. While amputation is recommended in cases of isolated metastases in patients with at least a few months of survival, radiation therapy may be useful for treating pain and partially restoring function. We conducted a retrospective review of 5 consecutive patients (2 male, 3 female; mean age of 46 years) presenting with metastases in the hand bones who had lung ($n = 2$), skin, uterus and kidney cancers. Conservative treatment was performed in three cases, transmetacarpal amputation in one case and distal phalanx amputation in one case. All patients died within a few months of the diagnosis (mean: 5.2 months). Because acrometastases generally are related to widespread disease, the prognosis of patients with acrometastases is poor. These cases illustrate the rapid progression of the disease when acrometastases in the hand are present.

© 2016 SFCM. Published by Elsevier Masson SAS. All rights reserved.

Keywords: Acrometastasis; Carcinoma; Hand; Finger

Résumé

Les métastases osseuses sont rares dans les formes débutantes de cancer. La présentation d'un cancer sous forme de métastases osseuses l'est encore plus et elle est associée à un mauvais pronostic. Si l'amputation digitale est généralement recommandée dans les cas de métastase solitaire, le délai moyen de survie de ces patients est de quelques mois. La radiothérapie peut être utile comme traitement antalgique et pour améliorer en partie la fonction. Nous avons mené une étude rétrospective d'une série consécutive de 5 patients (2 hommes, 3 femmes; âge moyen de 46 ans) ayant un cancer soit au poumon ($n = 2$), de la peau, de l'utérus ou du rein et présentant des métastases osseuses au niveau de la main. Un traitement conservateur a été réalisé dans 3 cas en raison du mauvais état général et du mauvais pronostic des patients; l'amputation était transmétacarpienne dans 1 cas et emportait la phalange distale dans un autre cas. Tous les patients sont décédés au cours de la première année (moyenne : 5,2 mois). La présence d'acrométastases est habituellement associée à une dissémination de la maladie. Les cas présentés illustrent la progression rapide de la maladie lorsque des métastases osseuses sont déjà présentes au niveau de la main.

© 2016 SFCM. Publié par Elsevier Masson SAS. Tous droits réservés.

Mots clés : Acrométastases ; Carcinome ; Main ; Doigt

1. Introduction

The presence of metastases in the distal extremities is unusual and accounts for less than 0.1% of malignant bone lesions [1–5]. Acrometastases found in autopsies of patients who had died of cancer add up to 0.6% in the hands and 2% in

* Corresponding author.

E-mail addresses: e.munoz.mahamud@gmail.com (E. Muñoz-Mahamud), combalia@clinic.cat (A. Combalia), acarreno@clinic.cat (A. Carreño), arandes@clinic.ub.es (J.M. Arandes).

<http://dx.doi.org/10.1016/j.hansur.2016.10.211>

2468-1229/© 2016 SFCM. Published by Elsevier Masson SAS. All rights reserved.

feet [6]. In extremely rare cases, acrometastases may be the initial manifestation of an occult cancer. They are usually caused by lung cancer and usually are diagnosed in terminal stages of the disease [7]. Their presentation as the first manifestation of cancer is extremely unusual and is associated with an average life expectancy of 6–7 months [8–10]. We report herein a series of 5 cases that illustrate the rapid progression of the disease when diagnosed by a metastasis in the hand and also carry out a review of literature.

2. Case reports

2.1. Case 1

A 63-year-old man with a 40 pack-year history of smoking and hypertension consulted because of increasing pain and a lump in the first metacarpal of his right hand that had appeared 2 months prior. There were no signs of inflammation and the patient had no other relevant history. Radiographs revealed nearly total destruction of the first metacarpal with only the distal epiphysis still present. Magnetic resonance imaging (MRI) was performed and then biopsy performed with a Tru-Cut™ biopsy needle. The biopsy identified atypical epithelial cells infiltrating tissue, suggestive of metastatic lung carcinoma. Once the diagnosis was made, an extension study in collaboration with the oncology department was performed. Local treatment of the injury was offered to the patient, but he refused and died 6 months later as a result of his underlying disease.

2.2. Case 2

A 52-year-old woman with a 45 pack-year history of smoking and polyclonal lymphocytosis B, consulted because of neck- and arm-related neuropathic pain that had started 6 months prior. A pancoast tumor located at the upper lobe of the right lung was identified by MRI; biopsy of the mass revealed the presence of a squamous cell lung carcinoma. An extension study using positron emission tomography found an acrometastasis in the middle phalanx of the middle finger of the left hand (Fig. 1). Transmetacarpal amputation was performed and the patient finally succumbed to her disease 12 months after the initial diagnosis.

2.3. Case 3

A 25-year-old woman with biopsy-proven melanoma in the interscapular region was treated with wide local resection and axillary lymphadenectomy. Twenty months after surgery, the patient started having mechanical pain in her right wrist. X-ray imaging studies revealed a lytic lesion, with thin septa and non-well defined margins in the capitate bone. Cortical thinning and destruction were seen on the radial side. CT-guided biopsy was positive for metastatic melanoma. One month later, the patient developed supraclavicular node metastasis and multiple subcutaneous metastases. Eventually, additional widespread metastases in the right adrenal gland, lung and skin developed and the patient died.



Fig. 1. Anteroposterior radiograph of the left hand showing a highly destructive lytic lesion in the middle phalanx of the ring finger.

2.4. Case 4

A 36-year-old woman with a medical history of stage-IV squamous cell carcinoma of the cervix presented at the emergency room with a felon on the ring finger of her right hand. It was drained and treated with antibiotics but did not resolve. X-ray imaging revealed a lytic lesion located at the distal phalanx. On suspicion of metastatic carcinoma of the cervix, amputation was performed at the distal interphalangeal joint. The pathology report described infiltration of a squamous-cell carcinoma with clean resection margins. An immuno-histochemical study showed the same positive expression as the primary cervical cancer. The finger wound healed as expected and the patient regained satisfactory function of the hand; however, her general condition gradually deteriorated and she died 4 months later.

2.5. Case 5

A 54-year-old male diagnosed with metastatic hypernephroma presented with a large lump on the distal tip of the thumb. X-ray imaging revealed destruction of the distal phalanx. No treatment was performed owing to the advanced stage of the disease and the patient died 2 months later.

3. Discussion

Acrometastases to the hands are an unusual cancer presentation. They have been reported mainly in men between 40 and 80 years of age [8]. In order of prevalence, the primary tumors that may metastasize to the hand are from the lung, kidney, breast and digestive tract [8–10]. However, studies about acrometastases to the hand are scarce and most of the data is based on retrospective case series and case reports.

Table 1 summarizes all the cases of acrometastases of the hand published in the English literature in the last 25 years. In all, 57 cases have been reported in patients with a mean age of 63.1 years (range 25–83), 23 women and 29 men (5 unknown). The most frequently reported metastatic locations are the

Download English Version:

<https://daneshyari.com/en/article/5708378>

Download Persian Version:

<https://daneshyari.com/article/5708378>

[Daneshyari.com](https://daneshyari.com)