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## Acrometastasis Due to Lung Cancer. A Case Presentation

# Acrometástasis por cáncer de pulmón. A propósito de un caso

To the Editor:

Acrometastasis are defined as malignant secondary lesions of the bones located in the hands and/or feet.¹ Only between 0.007 and 0.3% of patients with bone metastasis develop acrometastasis. Usually acrometastasis present as pre-terminal events in the context of disseminated cancer.¹ As a result, they may be of importance as the first manifestation of an occult cancer, or can simulate and be treated improperly as if they were other skeletal diseases.

A 63-year-old man. Heavy smoker, hospitalised for haemoptysis. Had a history of moderately differentiated squamous cell cancer in a metastatic supraclavicular lymph node with an unknown primary tumour 2 years before. A computed tomography revealed a large hilar mass with a peripheral nodular lesion in the right lung. Shortly afterwards the patient presented a painful tumour in the distal phalange of the left thumb (Fig. 1). Endobronchial and finger biopsies confirmed a moderately differentiated squamous cell carcinoma. An X-ray study revealed an osteolytic lesion of the distal phalange of the thumb. Amputation was performed at the interphalangeal joint. Later other metastasis appeared, and the patient died 6 months later.

In most patients with acrometastasis the lung is involved (it is the most common origin of hand metastasis in 40-47% of cases)<sup>2</sup>, possibly due to its capacity for propagation by the systemic route. There is an association between squamous cell cancer and the development of acrometastasis.<sup>3</sup> The right hand is more often affected than the left. Metastasis of the distal phalange has been reported in patients with pulmonary osteoarthropathy.1 This finding could be related to the local blood-supply flow. Clinically they present with local pain, erythema and oedema that simulate an acute infection or a pathological fracture.4 Frequently, they are initially confused with benign processes, such as hangnail, trauma, rheumatoid arthritis, osteomyelitis or gout. X-ray findings show, in almost all cases, lytic lesions without periosteal reaction, and without joint involvement. These are important signs when carrying out a radiological differential diagnosis with primary malignant tumours and osteomyelitis.<sup>1,5</sup> Needle puncture aspiration or biopsy are the most effective methods for diagnosis.

Acrometastasis normally appear during a very extended disease, and suggest an ominous prognosis. The treatments used for palliation include systemic chemotherapy, curettage, amputation of solitary lesions that grow in distal phalanges and short bones when there is no response to analgesia and radiotherapy (reserved for multiple lesions). Treatment is aimed at relieving pain and restoring function.<sup>6</sup> Due to the deceptive characteristics mentioned above, many cases are not initially diagnosed. Persistence of symptoms, lack of response



Figure 1. Acrometastasis of the left thumb.

to conservative treatment, or a history of cancer lead us to suspect this entity. The lack of early recognition leads to a delay in diagnosis and, consequently, inadequate treatment. As a result, a simple X-ray and a histopathological exam should be performed in all cases of doubtful interpretation.

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# The Athlete With Asthma and the New 2010 Anti-Doping Regulations. Less Work to Change for a Limited Therapy

# El deportista con asma y la nueva normativa antidopaje de 2010. Menos trabajo a cambio de una terapia limitada

To the Editor:

Clinical manifestations of greater bronchial reactivity in athletes are no longer news in our specialty or even in the world of sports journalism. Undoubtedly for many years the excess of information on the fact has been related to something more scandalous, the world of doping, an aspect that has had to be addressed. This has been so since the swimmer Rick Demont at the Munich Olympic Games in 1972 had his medal withdrawn because he tested positive to a substance considered to be used for doping, which was a characteristic of the medication he was using to treat his asthma. To date, the road has been a long one. The most significant facts are: athletes with asthma are allowed to use medication to treat their condition. Initially it was only necessary for a physician to indicate that the athlete suffered from asthma, subsequently medication was restricted to certain drugs, and for more than a decade now, control has been more exhaustive. Regulations were adjusted to include the use of only two models of short and long lasting beta agonists and the application that must be sent to the evaluating agency, the therapeutic use exemptions (TUEs), must comply with certain requirements. A sine qua non condition was that bronchial liability had to be demonstrated by the bronchodilator test or a certain degree of bronchoconstriction be determined by the test performed, isocapnic hyperventilation, stress, mannitol, metacoline or hypertonic saline.<sup>2</sup> I must add that the metacoline test is considered positive internationally at PD<sub>20</sub>FEV<sub>1</sub> < 4 mg/ml whereas nationally a dose of < 8 mg/ml is admitted in subjects that have already been treated with steroids. In both cases, these are acceptable criteria although somewhat demanding for a test that only measures bronchial hyperreactivity in an individual with a history compatible with sports asthma.3 How difficult it has been to achieve these criteria in some athletes during good periods. We know that not a few of them have stopped using medication for fear of being found positive to doping at moments in which their TUE was not in order, or even if it was, with the consequent risk to their health and performance. The TUE must be requested annually with the consequent discomfort for the patient and investment of time for them and the physician/s responsible for the process and the follow-

up of the athlete. However, it finally seems that the good judgments fairies have illuminated (without any darkness) the factorum of the organizations in charge of this process. The regulations of the World Anti-Doping Agency (WADA) that comes into force on the 1st of January 2010, says on this matter:2 "All beta-2 agonists are banned with the exception of salbutamol (maximum 1,600mcg in 24 hours) and salmeterol, both by inhalation, and they require a declaration of use according to the International Standard for Therapeutic Use Exemptions. The presence of salbutamol in urine at values > 1,000 ng/ml is presumed not to be due to therapeutic use of the substance and will be considered an adverse analytical result while the athlete does not prove, by means of a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of therapeutic doses (maximum 1,600 mcg in 24 hours) of inhaled salbutamol" (text similar to Spanish regulations BOE 25/12/2009 page. 109757). Therefore, we are all free of the hassle of carrying out tests and filling in reports and papers for merely bureaucratic reasons and we are only requested to indicate that the subject uses medication for asthma. We can administer what treatment we consider opportune steroids, antileukotriene agents, cromomes, antihistamines, immunomodulators...But, be careful! For betaagonist bronchodilators only salbutamol and/or salmeterol can be used. For the time being we must forget terbutaline and formoterol, which were allowed before or request a TUE according to the rules for banned medication and see what happens. The decision to remove these beta-agonists is not justified in the text. Is there any scientific reason? In principle, in the case of salbutamol there is a way of quantifying exactly the concentration in urine as well as identifying possible oral administration with a certain degree of precision,4 which is difficult with terbutaline.5 Maybe more work should be done on this aspect? Certainly, if necessary. However, the possible effect of therapeutic doses as an anticatabolic agent or a CNS stimulator is inexistent or irrelevant for both substances,6 and so far this has been considered so. What is the reason for the change? International organizations, the AMA and the national State Antidoping Agency (AEA) should make statements in this sense, since we would like to present reasonable arguments to the reason for this modification. However, quod sripsi, scripsi. We must try to think how we can modify confidence in treatment using these products, if the regulations are not changed within a prudent period of time. And what will happen with those athletes who have TUEs for use during the (2009-10) season? I understand these should be admitted, but they might not. Once more, it is necessary that the AMA and AEA make statements. Finally, to complete the information