

Case reports

Chondrosarcoma - local recurrence and systemic embolization

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Spread of tumour by systemic embolization is unusual especially when atrial myxoma and bronchogenic carcinoma are excluded. We report a case of distant systemic embolization from a recurrent chondrosarcoma of the chest wall. This case illustrates the acute presentation of this rare complication.

Case report

A 62-year-old man presented with a chondrosarcoma of the chest wall which was widely excised. He defaulted from follow-up but was seen again 8 years later with a local recurrence which was also widely excised and he received postoperative radiotherapy. Apart from cervical spondylosis and chronic bronchitis he remained well for a further 6 years but then represented as an emergency with a left brachial embolus. Embolectomy was performed and a core of pale white tissue was retrieved. Histological examination revealed this to be chondrosarcoma (Figure 1).

Three months later he was again seen as an emergency with an acutely ischaemic right leg but the symptoms and signs disappeared suddenly and spontaneously. However, he was noted at this time to have a recurrent tumour in the chest wall and a number of painful tender nodules in his hands (Figure 2). Biopsy of one of these nodules also revealed further chondrosarcoma. A computed tomography scan of the chest showed a very large mass of recurrent tumour which at the left hilum was indistinguishable from the left pulmonary artery. There were widespread pulmonary metastases.

His clinical condition deteriorated steadily and he died 4 months later. Consent for postmortem examination could not be obtained.



Figure 2. Painful tender nodules on the patient's hand

Discussion

Tumour cells in the circulation have been extensively studied in man^{1,2} and occur either as single cells or in small clumps. However the clinical relevance of such cells is disputed and the demonstration of circulating tumour cells seems to be of little prognostic significance irrespective of the site or type of primary tumour^{3,4}. This presumably reflects the nature of the circulating cells which may be post-mitotic or have a limited life span. Certainly attempts to establish such cells in culture in vitro have been unsuccessful and injection of tumour cells into laboratory animals⁵ shows a high death rate among the injected cells.

Nevertheless it seems likely that in our patient systemic embolization and the formation of metastatic nodules in the hands followed invasion of tumour into a pulmonary vein and it is therefore clear from this case and others in the literature^{6,7} that malignant cells in the circulation can lead to metastasis formation. It has certainly been shown in the field of colorectal cancer that histological evidence of venous invasion is associated with a significantly higher incidence of liver metastases independent of the local stage of the tumour⁸ although this may reflect an ability of the liver to nurture trapped tumour cells which in other situations might not be capable of producing metastases.

We believe that this case clearly demonstrates the ability of circulating tumour cells to give rise to metastases. It therefore provides strong support for the principle of early vascular ligation in cancer surgery since at least on theoretical grounds this might be expected to minimize the release of tumour cells into the circulation.

References

- Engell HC. Cancer cells in the circulating blood: a clinical study on the occurrence of cancer cells in the peripheral blood and in venous blood draining the tumour area at operation. *Acta Chir Scand Suppl* 1955;201:10-46
- Salsbury AJ. The significance of the circulating cancer cell. *Cancer Treat Rev* 1975;2:55-72
- Engell HC. Cancer cells in the blood. A five to nine year follow-up study. *Ann Surg* 1959;149:457
- Griffiths JD, McKinna JA, Rowbotham HD, Tsolakidis P, Salsbury AJ. Carcinoma of the colon and rectum: circulating malignant cells and five-year survival. *Cancer* 1973;31:226-36

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Figure 1. Chondrosarcoma, $\times 57$

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- 5 Fidler IJ. The relationship of embolic homogeneity, number, size and viability to the incidence of experimental metastasis. *Eur J Cancer* 1973;9:223-7
- 6 Boland TW, Winga ER, Kalfayan B. Chondrosarcoma - a case report with left atrial involvement and systemic embolization. *J Thorac Cardiovasc Surg* 1977;74:261-72
- 7 Cohen DE, Mora C, Keefe DL. Echocardiographic findings of

metastatic chondrosarcoma involving the left atrium. *Am Heart J* 1986;3:993-6

- 8 Talbot IC, Ritchie S, Leighton MH, Hughes AO, Bussey HJ, Morson BC. The clinical significance of invasion of veins by rectal cancer. *Br J Surg* 1980;67:439-42

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Late secondary syphilis altered by systemic corticosteroids in a human immunodeficiency virus antibody positive man

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The now rare presentation of late secondary syphilis was seen in a patient incorrectly treated for presumed allergic drug eruption with systemic corticosteroids, who we found to be human immunodeficiency virus (HIV) antibody positive.

Case report

A 66-year old homosexual went to his general practitioner in May 1985 complaining of anorexia and abdominal distension. Amoxycillin was given for 'gastric flu'. Two days later the patient, feeling better, stopped the capsules in the knowledge that they are penicillin-related, for he was mindful of his past history of penicillin allergy. Five days later he developed a truncal, macular erythematous, non-pruritic eruption and consulted a specialist who prescribed prednisolone. Six weeks later with worsening rash, the systemic prednisolone was increased to 30 mg daily.



Figure 1. Late secondary syphilis in HIV antibody positive patient

In August the rash was more widespread and papular. He had severe pains along the anterior tibiae relieved only by narcotic analgesics, felt ill and had anorexia, fevers and lethargy. By September he was still deteriorating and was given intramuscular adrenocorticotrophic hormone.

His general condition continued to deteriorate and he now complained of clouding of vision. At this stage he was admitted to St Stephen's Hospital. The patient gave a past history of gonorrhoea 40 years ago, urticarial reaction to penicillin 30 years ago, and 8 years ago detached retina. His last sexual contact was said to be three months prior to onset of illness.

We found him to be pale with fever and generalized non-tender lymphadenopathy. An exuberant and profuse generalized, polymorphic, plaque-like eruption with weeping ulceration of many lesions affected the scalp, face, trunk (Figure 1), limbs, palms and soles, and genitalia. The liver was just palpable and not tender. There were no mouth ulcers. The ophthalmologist diagnosed bilateral iridocyclitis.

Investigations revealed a normochromic normocytic anaemia of 9.0 g/dl with white cell count $3.0 \times 10^9/l$ and an erythrocyte sedimentation rate of 95 mm in one hour. Venereal disease research laboratory test was positive at greater than 1/256. *Treponema pallidum* haemagglutination was also positive. Liver function tests were normal. Chest X-ray showed a right hilar nodular opacity and X-ray of tibiae was normal. Abdominal ultrasound demonstrated an enlarged spleen and a slightly enlarged liver. Skin biopsy examination showed a massive upper mid-dermal chronic inflammatory cell infiltrate with large numbers of plasma cells surrounding blood vessels and extending to the dermal-epidermal junction. The HIV antibody enzyme linked immunosorbent assay and radioimmune assay were positive.

The diagnosis of late secondary syphilis was made and oxytetracycline 500 mg four times daily for 3 weeks given. The patient improved dramatically with resolution of tibial pains in 24 h, settling of fever in 4 days, and healing of the eruption in 3 weeks.

Discussion

Why did this, now rare, clinical picture¹ of pre-antibiotic-era secondary syphilis occur? Importantly, the diagnosis was delayed and he was treated inappropriately for syphilis with 6 months of systemic corticosteroids. Also, the expression of the disease may have been altered by HIV infection.

References

- 1 Stokes JH. *Modern clinical syphilology*. London: W B Saunders, 1942:771-870

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