

CASE REPORT: COBBLESTONE

Multicentric plasma cell variant Castleman's disease mimicking intrapulmonary malignancy

J Buckley, P J Shaw, J D Cartledge, R F Miller

Sex Transm Infect 2002;**78**:304–305

Multicentric Castleman's disease (CD) is an unusual B cell lymphoproliferative disorder in HIV infected individuals,¹ and is caused by human herpesvirus 8.

A 41 year old white homosexual man presented in December 2000 with a 3 month history of weight loss, fevers, slowly progressive cervical lymphadenopathy, and oro-cutaneous Kaposi's sarcoma. At this time he was found to be HIV-1 antibody positive; baseline investigations showed CD4 count of 120 cells $\times 10^6/l$, HIV viral load 130 000 copies/ml, Hb = 8.4 g/dl, white blood count = $2.8 \times 10^9/l$, and platelet count $118 \times 10^9/l$. A bone marrow aspirate showed a hypercellular marrow with marked dysplasia of all three cell lines. These changes were ascribed to HIV infection. A chest radiograph was normal. Antiretroviral therapy with stavudine, lamivudine, and efavirenz, and anti-pneumocystis prophylaxis with co-trimoxazole was commenced.

Two weeks later, in January 2001, an excision biopsy of a cervical lymph node was performed, the histology of which showed Kaposi's sarcoma and plasma cell variant CD. At this time the patient reported 2 weeks of slowly progressive exertional dyspnoea, intermittent fever, sweats and rigors, a cough productive of mucoid sputum, and a sensation of epigastric fullness/distension after eating. Examination revealed multiple rubbery lymph nodes (each ≤ 0.5 cm) in the submandibular, cervical chain, axillary and inguinal regions, and multiple lesions of Kaposi's sarcoma on the trunk, limbs, and in the mouth sublingually. In the chest, there were bibasal end inspiratory crackles; Sao₂ (on room air) = 98%. In the abdomen there was a 1 cm firm hepatosplenomegaly. Investigations showed persistent pancytopenia; urea and electrolytes and liver function tests were normal. Culture of blood, stool, and urine were negative for bacteria, mycobacteria, and fungi. A chest radiograph showed bilateral hilar lymphadenopathy and diffuse interstitial parenchymal changes. Abdominal ultrasound showed homogeneous hepatosplenomegaly. At bronchoscopy the tracheobronchial tree was normal; staining

and culture of bronchoalveolar lavage fluid was negative for *Pneumocystis carinii* and other fungi, bacteria, mycobacteria, and viruses. A thoracic computed tomograph (CT) scan showed patchy ground glass shadowing and nodular thickening of the interlobular septae (fig 1).

Gastroscopy demonstrated Kaposi's sarcoma in the lower oesophagus and duodenum. Open lung biopsy (right upper and lower lobes) showed CD only; staining and culture were negative for bacteria, mycobacteria, fungi, and viruses. The patient was slow to recover postoperatively. Persistent pancytopenia required blood transfusion. Increasing dyspnoea preceded a fatal hypoxic arrest, 15 days after operation. Necropsy was not performed.

DISCUSSION

Open lung biopsy was performed, given the discrepancy between the CT scan appearances of ground glass shadowing, suggesting *P carinii* or other opportunistic infection,² and nodular thickening of interlobular septae, suggesting malignant infiltration with Kaposi's sarcoma or lymphoma,³ and the bronchoscopic findings.

In contrast with this case, CD in non-HIV infected patients invariably shows hilar/mediastinal lymphadenopathy and centrilobular nodules on CT^{4,5}; additional parenchymal abnormalities are rare. This case underscores the value of open lung biopsy in investigation of HIV infected patients with respiratory episodes and negative results from bronchoscopy.⁶ It also suggests that CD should be added to the differential diagnosis of CT appearances suggestive of malignant infiltration.

CONTRIBUTORS

JB abstracted the patient's clinical and pathological records and co-wrote the first draft of the manuscript; PJS reported the patient's CT scan, wrote the figure legend, and commented on drafts of the manuscript; JDC commented on drafts of the manuscript; RFM proposed the project, co-wrote the first draft, incorporated comments from co-authors on drafts, and wrote the final version of the manuscript.

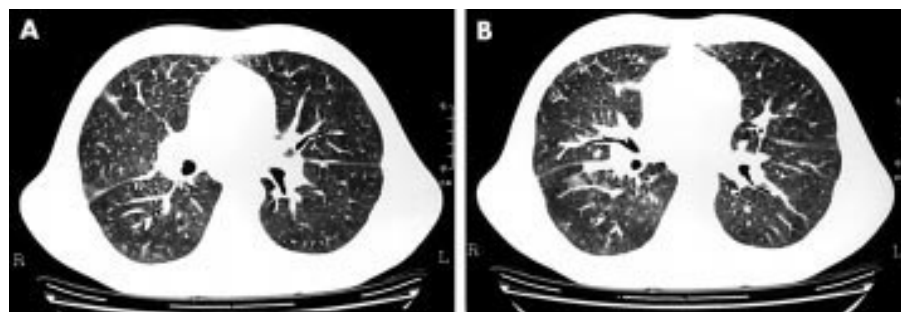


Figure 1 (A) CT scan at the level of the hilar. Focal areas of ground glass shadowing are seen in the apical segment of the right lower lobe, which are largely centrilobular in distribution and are associated with small airways disease. In addition, the bronchovascular bundles are thickened, indicating soft tissue abnormality in a perilymphatic distribution. These changes extend into the middle lobe and occur adjacent to the right oblique fissure. (B) CT scan through the bottom of the hilar, just below the middle lobe carina. There is non-uniform smooth and nodular thickening of the interlobular septa in the right lower lobe, associated with focal areas of ground glass shadowing. The former pattern is typical of malignant infiltration.

Source of funding: nil.

Conflict of interest: nil.

.....
Authors' affiliations

J Buckley, J D Cartledge, R F Miller, Department of Sexually Transmitted Diseases, Royal Free and University College Medical School, Camden and Islington Community Health Services NHS Trust, Mortimer Market Centre, London WC1E 6AU, UK

P J Shaw, Directorate of Imaging, Radiology Department, University College London Hospitals, NHS Trust, London WC1E 6AU, UK

Correspondence to: Dr R Miller; rmiller@gum.ucl.ac.uk

Accepted for publication 17 May 2002

REFERENCES

- 1 **Okensenhendler E**, Duarte M, Soulier J, *et al*. Multicentric Castleman's disease in HIV infection: a clinical and pathological study of 20 patients. *AIDS* 1996;**10**:61-7.
- 2 **Boiselle PM**, Crans CA, Kaplan MA. The changing face of *Pneumocystis carinii* pneumonia in AIDS patients. *Am J Radiol* 1999;**172**:1301-9.
- 3 **Trull ZC**, Miller RF, Shaw PJ. CT appearances of intrathoracic Kaposi's sarcoma in patients with AIDS. *Br J Radiol* 1996;**69**:1104-7.
- 4 **Barrie JR**, English JC, Muller N. Castleman's disease of the lung: radiographic, high-resolution CT and pathologic findings. *Am J Radiol* 1996;**166**:1055-6.
- 5 **Jonkoh T**, Muller NL, Ichikado K, *et al*. Intrathoracic multicentric Castleman's disease: CT findings in 12 patients. *Radiology* 1998;**209**:477-81.
- 6 **Miller RF**, Pugsley WB, Griffiths MH. Open lung biopsy for investigations of acute respiratory episodes in patients with HIV infection and AIDS. *Genitourin Med* 1995;**71**:280-5.

ELECTRONIC PAGES.....

Global views



Please visit the Sexually Transmitted Infections website [www.sextransinf.com] for links to the full articles

Sexually Transmitted Infections receives an increasing number of articles relating to prevalence of STIs or the performance of various syndromic management protocols in different populations. While these are very important for policymakers and clinicians locally, they tend to have limited applicability to other populations. For this reason we will publish these articles, after peer review, in full through eSTI. The paper edition of the journal will feature full abstracts in the "global view" section.

***Chlamydia trachomatis* infection among sexually active young women in Italy**

M A Latino, L Bello, A Lanza, E Leotta, P Tersiev, G De Intinis, E Spagnolo, C Smirne, R Grio

Objectives: *Chlamydia trachomatis* infection is the most common sexually transmitted disease among sexually active adolescents and young adults in Europe. The goal of this study was to determine the prevalence of *C trachomatis* among young women in Turin, Italy, and the correlation between some risk factors and *C trachomatis* infection.

Methods: In our study 3314 sexually active women between the ages of 14 and 25 were screened for *C trachomatis* by ligase chain reaction (LCR) using cervical swabs during the period 1997-2000 at the Turin School of Medicine. All the patients answered a specific questionnaire.

Results: In our analysis the prevalence of *C trachomatis* infection was found to be 3.5%, and the average age among the infected patients was 22.12 years. Statistical analysis was performed using the χ^2 test. A *p* value <0.05 was considered significant. A correlation was found between a positive result and: membership of east European and central northern Africa populations (*p*<0.001), low levels of education (*p*<0.001), age at the first intercourse (*p*=0.006), the presence of symptoms in the women (*p*<0.001), and the number of sexual partners in the preceding 6 months (*p*<0.001). No statistically significant difference was found among the contraceptive methods used whether hormonal or a barrier type and with the subjective symptoms of the partner.

Conclusion: Frequent microbiological examinations are desirable for patients whose anamnesis shows an increased risk of contracting sexually transmitted infections in order to avoid long term complications from misdiagnosed or asymptomatic pathologies; this often happens with *C trachomatis* infection.

(*Sex Transm Infect* 2002;**78**:e4) www.sextransinf.com/cgi/content/full/78/4/e4

Current characteristics of male gonorrhoea outpatients in Athens, Greece

K P Kyriakis, E Tzelepi, H Avgerinou, L S Tzouveleakis, A Fliemetakis, E Frangouli

Objective: To assess and compare current disease related behavioural and sociodemographic characteristics of male gonorrhoea patients in the greater area of Athens, Greece.

Methods: A 3 year cross sectional hospital based study (1999-2001) of 280 consecutive symptomatic male volunteers, comprising 212 Greek and immigrant heterosexuals and 68 men having sex with men (MSM) was carried out. Temporal alterations were approximated by comparisons with a previous observation period (1990-6).

Results: Health seeking behaviour, rate of partner change, source of infection categorisation, and having sex while symptomatic were unrelated to sexual orientation. A delayed health seeking behaviour and higher rates of partner change were significantly associated with contacts while symptomatic. Immigrant heterosexuals were of lower socioeconomic level and contracted gonorrhoea from higher risk partners. Greek MSM were younger than heterosexuals and more frequently disease/STD repeaters. The percentage of MSM (24.3%) is considerably higher than that in a previous observation period (5.5%, 1984-96).

Conclusions: Preventive interventions among MSM, immigrants, and promiscuous heterosexuals must be intensified.

(*Sex Transm Infect* 2002;**78**:e5) www.sextransinf.com/cgi/content/full/78/4/e5