

SEPTIC ARTHRITIS IN A HIV POSITIVE HEMOPHILIA A PATIENT

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INTRODUCTION

Septic arthritis is a rare complication of either HIV infection or hemophilia alone, but occurs with an exceedingly high prevalence in hemophilia patients infected with HIV.

The clinical picture mimics that of haemarthrosis, often causing a delay in diagnosis, but there are some important distinguishing criteria speaking in favour of septic arthritis: fever, elevated peripheral leukocyte count and increasing complaints despite normalisation of the coagulation defect.

The localization is exclusively to joints affected by haemophilic arthropathy.

CASE REPORT

- 22 year old severe hemophilia A patient, without inhibitors to factor VIII.
- HIV-infected since 1985.
- He has been on factor VIII on demand and is non-compliant regarding HIV follow-up.
- One of his target joints is the right elbow.
- When he was admitted to hospital he was complaining of pain in the right elbow of five days' duration, which he thought was caused by a hemarthrosis.
- He was being treated daily, at home, since the beginning of the complaints with increasing doses of factor VIII concentrate (2000 to 3000 IU), without clinical improvement and one week prior the symptoms, he had an upper tract infection that was being treated with clarithromycin per os.
- The physical examination revealed a warm, erythematous, swollen, tender elbow joint (Fig. 1). The patient's temperature was 38.5 degrees Celsius.

DAY	1	2	6	9	16
Hb	9.3	9.0	9.7	10.4	10.3
Leukoc.	4600	3400	2600	3100	2300
Platelets	207000	217000	222000	221000	129000
PCR	11.7	-	-	0.5	0.2
ESR	96	-	94	88	85

Table 1



Fig. 3

DISCUSSION

Since the advent of human immunodeficiency virus (HIV) infection there has been an increased incidence of septic arthritis due to both usual and unusual organisms and it has been assumed that a transient bacteremia is the source of the joint infection. Thus the diagnosis of septic arthritis should be considered in a hemophiliac who develops a hemarthrosis associated with fever and a poor response to coagulation factor concentrate and immobilisation. Because of their immunosuppression, HIV infected patients do not mount a neutrophil response to sepsis and the white cell count is often normal or low. Arthrotomy or arthroscopic lavage is the usual treatment for an infected joint. However due to the risk of these procedures some authors recommend in these patients, as first line therapy, appropriate antibiotic therapy and prompt rehabilitation of the affected joint.



Fig. 1

- The leukocyte count was 4600 cells/mm³, higher than the patient usually has (around 2000 cells/mm³).
- The sedimentation rate was 96 millimeters/hour (table 1).
- The elbow joint was aspirated and a sero-hematic fluid was obtained. The cultural examination was positive for *S. aureus* (Fig. 2) and antibiotic treatment was changed to gentamycin plus cephazolin I.V., according to the antibiotic sensibility test.



Fig. 2

- After 3 days, the fever was resolved but the joint continued swollen and tender, and at day 9 the patient was submitted to an arthrotomy (Fig. 3). It was obtained a sero-hematic fluid with a sterile culture.
- There was no functional improvement of the elbow and the patient was discharged from hospital 30 days after on trimethoprim plus sulphamethoxazole per os, with a leukocyte count of 2300 cells/mm³ and a sedimentation rate of 85 millimeters per hour (table 1).
- One year later the patient continues with an ankylosis of the elbow joint, despite mobilisation with physiotherapy has been tried.

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