Case Report

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Lymphocytic Infiltration of the Prostate Presenting as Retention

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Key Words

Lymphocytic infiltration
Leukaemia
Prostate

Abstract

A patient with previously undiagnosed asymptomatic chronic lymphocytic leukaemia presenting with acute on chronic retention is reported. The relevant literature is discussed.

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Introduction

Discussion

Chronic lymphocytic leukaemia (CLL) with lymphocytic infiltration of the prostate presenting as retention is rare. In a 10-year review, Wilbur and Taylor [1] reported 10 patients with known leukaemia who presented with symptoms of prostatic enlargement; of these only 2 had leukaemic infiltration of the prostate. We present a case of lymphocytic infiltration of the prostate presenting with acute on chronic retention.

Case Report

D.W., a 58-year-old merchant seaman, was admitted as an emergency in acute on chronic retention. In the past he described prostatic symptoms with hesitancy and a poor stream for 2 years. Catheterisation drained a residue of 1,500 ml and relieved his symptoms. Clinically his prostate was small and benign. Routine haematological studies showed a haemoglobin of 14.4 g/dl and a white blood cell count of $94.0 \times 10^9/l$ with 86.5% lymphocytes, smear cells and polymorphocytes, suggesting CLL. There was no evidence on the blood picture to suggest marrow failure and there was no hepatosplenomegaly or lymphadenopathy. Renal function was normal. The patient underwent an uneventful transurethral prostatectomy, under antibiotic cover, in view of the risk of sepsis. Histological examination of the prostate showed benign hyperplasia with marked infiltration by well-differentiated lymphocytes. Postoperatively the patient is well and is under the care of the Department of Haematology for treatment of his CLL.

The first report of prostatectomy in a patient with chronic leukaemia with leukaemic infiltration of the prostate was by Jacobi et al. [2] in 1937. Since then there have been sporadic reports of CLL patients with prostatic infiltration. Some of these patients were known to be leukaemic at the time of presentation, but many were discovered during investigation for bladder outflow obstruction. In a minority the diagnosis was made for the first time on histological examination

of the resected prostate. CLL is a disease of old age, with a peak incidence of 60 years and a male:female ratio of 2:1. Thus patients with CLL and prostatic symptoms will coexist. Patients with leukaemia can experience retention due to leukaemic infiltration. However, more often the obstructive symptoms are due to benign hyperplasia and leukaemic infiltration is a secondary feature. Of the reported cases, including our patient, who have undergone prostatectomy for bladder outflow obstruction with lymphocytic infiltration of the prostate, the results of surgery have been very satisfactory. There was 1 death each due to bleeding, sepsis and pulmonary infarction and 1 death due to unrelated causes [3]. Butler and O'Flynn [4] reporting prostate disease in the leukaemic patient in a retrospective study of 6 patients, had 2 deaths, 1 probably related. Both in their clinical presentation and response to prostatic surgery, there seems to be

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little difference between patients with leukaemic infiltration of the prostate and those with benign hyperplasia. In view of these satisfactory results, patients with CLL who develop prostatic obstruction do not require any special urological treatment, other than chest physiotherapy and antibiotics perioperatively to prevent sepsis. CLL is essentially a benign condition and only surveillance is recommended. The effect of CLL in patients undergoing surgery is an increased incidence of concurrent infections. Our patient did not have any problems either intra- or postoperatively and has made a satisfactory recovery.

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Leukaemia Causing Retention