In various studies pericarditis was similar in both sexes (2, 8). The prevalence of pericarditis in our male patients was significantly higher than in females. The prevalence of pleurisy in our male patients was higher than in females, although the difference did not reach statistical significance. The prevalence of pleurisy in our male patients was higher than in some studies (1, 8, 11) and lower than in other studies (2, 10).

One study has reported nephritis to be more common in males (11), while others did not detect any difference (2, 8, 9). In our study, there was no difference between male and female lupus nephritis. Pande *et al.* (1) found an increased incidence of skin lesions in male patients. This has not been reported in earlier studies (2, 11). In our male patients, the prevalence of malar rash, alopecia, photosensitivity and Raynaud's phenomenon were significantly lower than in female patients. Hepatomegaly was higher in male than in female patients. Sthoeger *et al.* (11) also observed a higher incidence of hepatosplenomegaly in male patients with SLE.

There was no difference in laboratory findings between our male and female patients. Leucopenia was less frequent in our male patients compared to some studies (5, 10, 11). Although several investigators have found thrombocytopenia and hemolytic anemia to be more common among male patients (5, 11), in our study there was no sex difference. We conclude that the spectrum of SLE tends to be relatively different in females and males. The reason for these discrepancies may be ethnic differences in disease manifestation.

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Haematogenous vertebral osteomyelitis caused by *Staphylococcus epidermidis*: Report of 4 cases

Sirs,

The incidence of iatrogenic vertebral osteomyelitis (VO) due to *Staphylococcus epidermidis* by direct inoculation complicating medical or surgical procedures involving the spine is increasing. VO due to *S. epidermidis* following haematogenous spread is an entity rarely reported in the literature (1-7). We present 4 new cases.

Some of the clinical and radiographic findings, laboratory data and outcome are summarized in Table I. In our 4 male patients, 3 or more cultures were positive. Immunosuppresssion and previous intravenous (IV) cannulations were present in 3 patients. In the remainder, a 76-year-old man without a recognized portal of entry, risk factors for developing VO were absent. Simple X-rays showed disk space narrowing and erosions of the vertebral end plates in all 4 patients. MRI was performed in 3 patients: typical changes suggesting VO (hypointense signal intensity in the vertebral body on T1-weighted images, increased vertebral body signal intensity on T2-weighted images, and abnormal disk signal intensity on both T1 and T2-weighted images, contrast enhancement and paravertebral mass) were present in all 3.

During the first 2 weeks after the diagnosis, treatment with IV vancomycin (500 mg/6 hrs) was administered in the 4 cases, followed by a regimen of oral oxacillin (1 g/6 hrs) for 14 weeks in those with complete recovery. One individual suffering from an associated endocarditis confirmed by echocardiogram died after prosthetic valvular replacement. In the 3 remaining cases, complete recovery with radiographic healing of the lesions was seen one year after the diagnosis.

Haematogenous VO is a rare entity. Haemodialisis in diabetic individuals (4, 6, 7), IV drug abuse (5), and IV cannulation in elderly patients (2) are predisposing recognized risk factors, although a recent report showed clinical and radiological findings in an elderly male patient with no evidence of immunosuppression or an obvious portal of entry, as in one of our cases (1). Our 4 patients were elderly and 3 of them had predisposing factors for infectious complications: in 2 patients prostatic neoplasm, and in 1 patient diabetes, chronic hepatic disease and rheumatoid arthritis treated with methotrexate and steroids. This latter was the only one with a recognized infectious focus in which *S. epidermidis* had been previously isolated (knee prosthesis). Previous IV cannulation was present in 3 of our cases. Patient number 3 died; he suffered from an associated endocarditis with cardiac failure requiring valvular replacement. The association of VO and endocarditis due to *S. epidermidis* has been previously reported (3). In 3 of our cases (patients 1, 2 and 3) echocardiograms were carried out; they suggested endocarditis only in patient number 3.

Laboratory findings in haematogenous VO are non-specific: leukocytosis may be absent (6) and ESR and CRP values are highly variable (1). Blood cultures are the most valuable routine tests (they were positive in our 4 patients). If they are negative, bone biopsy or disco-vertebral needle aspiration is necessary. The outcome is usually good and the majority of patients recover fully after specific antimicrobial therapy (1-7), usually with vancomycin, although the levels and bactericidal activity which it achieves in bone may vary.

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Letters to the Editor

Table I. Clinical and radiological findings, laboratory values and outcome in the four patients.

	Case 1	Case 2	Case 3	Case 4
Age (years)	83	76	77	71
Sex	M	M	M	M
Risk factors	Prostatic neoplasm		Prostatic neoplasm	Diabetes, hepatic disease, steroids MTX, RA, knee infection
Days between onset and diagnosis	60	120	30	30
Previous IV cannulation	Yes	No	Yes	Yes
Fever	No	No	Yes	Yes
Site	Lumbar	Lumbar	Lumbar	Lumbar
Neurologic involvement	No	No	No	No
Diagnostic method	Blood cultures	Discal needle aspiration + blood cultures	Blood cultures	Discal needle aspiration + blood cultures
Laboratory tests				
ESR (mm/hr)	39	72	18	150
WBC (10^9/l)	7.72	12.6	6.5	7.6
Hgb (g/l)	108	100	113	100
Abnormal radiographic findings				
Simple RX	+	+	+	+
^{99m}TC scan		+	+	+
CT		+		+
MRI	+	+	+	
Outcome	Good	Good	Endocarditis Death	Good

MTX: methotrexate; RA: rheumatoid arthritis

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