

arthritis involving *I belli* and *Cryptosporidium* infestation in patients with AIDS are not yet well known. Further studies should help clarify these questions. We are not aware of any previous report of reactive arthritis after enteric infection due to *I belli* and we believe this to be the first such report.

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urinary monoclonal free light chains. These are now best detected using the more sensitive techniques of immunoelectrophoresis or immunofixation. As this interesting case demonstrates, serum immunoglobulin levels can remain normal in a few cases, even in the terminal stages of disease. It is therefore imperative that paired serum and urine samples are sent for immunochemical analysis.

We feel it is potentially misleading to say that "... Traces of urinary BJP in isolation can prove to be benign ...". It is generally agreed that their detection is highly suggestive of underlying lymphoproliferative disease in the majority of cases and it is unwise to dismiss such findings as benign.<sup>2</sup> In addition the definition of "a trace" will depend heavily on the detection system employed in individual laboratories - accurate quantitation of the free light chains should routinely be undertaken; measurement of total urine protein is less informative. These are the important lessons we must appreciate if patients with occult myeloma are to be detected and successfully treated.

We would emphasise that in patients presenting in this manner, a more aggressive investigational approach is indicated, including early bone marrow examination and radioisotope scanning of bone. Only when negative results from these investigations are available would it be advisable to monitor the patient over time remembering that a repeat bone marrow examination is always an option at a later date.

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**AUTHORS' REPLY** We are pleased that the first article in *Lesson of the month* has attracted interest and correspondence.

In reply to Dr Edgar *et al*, we feel that the use of Bence-Jones protein (BJP) as a descriptive term for urinary monoclonal free light chains is in such standard usage as to be fully acceptable; few clinicians or laboratory scientists would be in any doubt as to the meaning of this term.<sup>1</sup>

The agarose gel electrophoretic assay used for the detection of urinary BJP in our laboratory has a sensitivity of 0.08 g/l, which after concentration of urine ×200 gives a lower limit of detection of approximately 0.001 g/l of monoclonal BJP (Sheldon J, personal communication). In this case BJP was not quantified but was expressed as two faint bands of Kappa protein at initial testing. The laboratory routinely expresses BJP calculated as a 'percentage of total urinary protein'.

It is our experience, and that of our colleagues in the laboratory, that the term 'benign' can be applied to the presence of a monoclonal protein in persons with no evidence of myeloma, Waldenstroms macroglobulinaemia, amyloidosis or other related B cell malignancy. We suggest that the term can only be applied once the condition is shown to be stable with time - five years for IgG and IgA and 10 years for IgM paraprotein. An

alternative term monoclonal gammopathy of unknown significance (MGU) is better used when any doubt exists.

We agree with Dr Edgar *et al*, and hope that *Lesson of the month* highlights the need to follow up the findings of even a faint band of BJP with serial BJP measurements. It was this omission which led to the difficulties encountered in this case. However, we appreciate the concern expressed by Dr Edgar that early bone marrow examination be undertaken if any BJP is detected and there is general agreement that this decision should be based on clinical judgement. Most clinicians would find it impossible, for reasons of resource limitation and clinical acceptability, to perform bone marrow examination on every patient with any detectable BJP, although this is a moot point. Certainly levels of >0.01 mg/l are more suggestive of malignancy and should be investigated with bone marrow examination. As far as other investigations are concerned plain radiographs are generally regarded as a more sensitive indicator of the presence of myeloma. Isotope bone scans can often be normal in myeloma even with significant bony deposits. Interpretation of the finding of BJP may be aided also by assay of β<sub>2</sub> microglobulin. β<sub>2</sub> microglobulin may be elevated either with deterioration in renal function or with myeloma tumour mass; interpretation of elevated levels may be difficult.

If *Lesson of the month* continues to draw attention to important clinical issues and to open areas of controversy then it will surely achieve its intended purpose.

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## Antiphospholipid antibodies (aPL) in systemic lupus erythematosus. Are they specific tools for the diagnosis of aPL syndrome?

We read with interest the paper by Ghirardello *et al*<sup>1</sup> on antiphospholipid antibodies (aPL) in systemic lupus erythematosus (SLE) but would suggest that their conclusion, "lupus anticoagulant (LA) but not anticardiolipin antibody (aCL) positivity is a specific tool for the diagnosis of thrombotic complications... in SLE", is interpreted with caution.

There are a number of methodological problems in setting up a study of this kind which should be highlighted:

- This study was retrospective and it cannot be assumed that because a patient is aPL +ve at the time of study, they were also aPL +ve at the time of diagnosis of SLE. In fact, the authors do not specifically state in reference to the 47 patients who had experienced pregnancy, whether they were diagnosed as having SLE at that time. It is therefore likely that the recording of aPL complications using

## MATTERS ARISING

### Bence-Jones protein and vertebral osteoporosis

We welcome the introduction of *Lesson of the Month* and read with interest the case report submitted by Hughes *et al*<sup>1</sup> regarding the investigation of patients presenting with back pain. As the authors rightly point out, the exclusion of occult lymphoproliferative disorders in this group of patients is of the utmost importance. There are, however, several points of concern arising from the case particularly in relation to the clinical interpretation of monoclonal urinary free light chains.

The use of the term Bence-Jones protein (BJP) can cause confusion as it refers to the original heating test for the detection of