

true histiocytic (rather than B-cell) malignant neoplasm with the disease represents further evidence in support of this viewpoint.

Royal South Hants Hospital,
Graham Road,
Southampton SO9 4PE.

C. COOPER
M. I. D. CAWLEY

References

- 1 Prior P, Symmons D P M, Hawkins C F, Scott D L, Brown R. Cancer morbidity in rheumatoid arthritis. *Ann Rheum Dis* 1984; **43**: 128-31.
- 2 Symmons D P M, Ahern M, Bacon P A, *et al*. Lymphoproliferative malignancy in rheumatoid arthritis: a study of 20 cases. *Ann Rheum Dis* 1984; **43**: 132-5.
- 3 Isaacson P, Wright D H. Coeliac disease and malignant histiocytosis of the intestine. In: Whitehouse J M A, Williams C J, eds. *Recent advances in clinical oncology*. London, Edinburgh: Churchill-Livingstone, 1982: **1**: 233-45.

Synovial fluid complement levels in Behçet's disease

SIR, We are interested in the study of Yurdakul *et al.*¹ on the arthritis of Behçet's disease (BD). Circulating immune complexes are known to be present in approximately 50% of patients, especially in those with uveitis, arthritis, and central nervous system involvement.² These may arise in the serum or at the site of local pathology, and are probably involved in the pathogenesis of the arthritis.

We have studied synovial fluid and serum complement levels simultaneously in 15 patients with BD, 17 patients with rheumatoid arthritis (RA), and in 100 control sera. The total complement activity was measured by the technique described by Mayer, and C3 and C4 fractions by radial immunodiffusion using C3 and C4 monospecific antisera.

Thus it was shown that serum complement levels were the

same in BD and RA, but that synovial fluid total haemolytic complement and C3 and C4 levels were significantly higher in BD than in RA (respectively $p < 0.001$, $p < 0.01$, $p < 0.001$) (Table 1).

The ratio of serum/synovial fluid CH50 and C4 levels remained constant and, for each patient, equalled 2 in BD and ≥ 4 in RA, the difference being significant (respectively $p < 0.001$, $p < 0.01$). The ratio of serum/synovial fluid C3 was also 2 in BD but was difficult to determine in RA because of the probable existence of degradation products which gave aberrant results.

Some previous studies on complement levels in synovial fluid in BD have been published, but these did not include comparison with serum complement levels.³⁻⁵ In our study we conclude that the ratio of serum to synovial fluid complement levels helps to distinguish the arthritis of BD from RA. Therefore, these two diseases seem to have different pathogenetic mechanisms.

Service de Médecine Interne
(Section Rhumatologie) et
Laboratoire d'Immunologie,
Hôpital Charles Nicolle,
Tunis,
Tunisie.

M'HAMED HAMZA
KHALED AYED
MOHAMED EL EUCH
MOHAMED MOALLA
HASSOUNA BEN AYED

References

- 1 Yurdakul S, Yazici H, Tuzun Y, *et al*. The arthritis of Behçet's disease: a prospective study. *Ann Rheum Dis* 1983; **42**: 505-15.
- 2 Lehner T, Barnes C G, eds. *Behçet's syndrome*. London and New York: Academic Press, 1979.
- 3 Abdou N I, Schumacher H R, Colman R W, *et al*. Behçet's disease: possible role of secretory component deficiency, synovial inclusions, and fibrinolytic abnormality in the various manifestations of the disease. *J Lab Clin Med* 1978; **91**: 409-21.
- 4 Bisson M, Amor B, Kahan A, Delbarre F. Les manifestations articulaires de l'aphtose (syndrome de Behçet). *Sem Hop Paris* 1971; **47**: 2023-33.
- 5 Zizic T M, Stevens M D. The arthropathy of Behçet's disease. *Johns Hopkins Med J* 1975; **136**: 243-50.

Table 1 Results of tests

	CH50 (U/ml)	C3 (mg/dl)	C4 (mg/dl)
<i>Behçet's disease</i>			
Serum	56.3±17.6	144.5±38	42.6±15.4
Synovial fluid	30.15±6.9	76.09±25.9	32.32±15.08
<i>Rheumatoid arthritis</i>			
Serum	45.8±18.3	141.6±45	40.5±14
Synovial fluid	11.51±7.75	43.7±32.41	14.56±11.53
<i>Controls</i>			
Serum	43.3±18.2	123.5±41	34.5±17.8