Discussion

DR. K. WHALEY (*Glasgow*) The low percentage of 'T' cells using your rosette test is extremely interesting; this is far lower than most people report. I wonder whether there are technical variations between your technique and that of other workers. Two things spring to mind; one, how do you define the rosette, perhaps you have more stringent criteria than most other people, and secondly at what temperature do you perform the assay?

DR. HOLT The rosette has to have 5 red cells on it to be a positive and the assay is performed at 4°C, but the preliminary incubation with sera is at 37°C.

DR. K. WHALEY (*Glasgow*) Quite. One of the problems at 37°C is that rosettes are very unstable and tend to break-down very quickly. Therefore, most people, including yourself, perform the test at 4°C. The other point of 5 red cells being necessary before one can definitely say a rosette is present is more than most people accept. This variation could account for your low results.

DR. HOLT We are aware of this point. Our interest was to find a level at which we could show the change. Because by using one method you can push the results for 'B' and 'T' cells up to 100%, it does not necessarily mean it is the ideal way of doing the test, nor that it represents normality.

DR. K. WHALEY (*Glasgow*) Yes, I agree; most people push it up to 60% but it may in fact improve your results. There may be bigger differences.

DR. HOLT If you push it like that, I think you would probably improve the ability of the rosettes to stick together and you do not get this variability coming out quite so easily.

DR. W. C. DICK (*Glasgow*) Have you completely excluded by studies both *in vitro* and *in vivo* that these as yet undefined factors which are albumin bound and of small molecular weight could not be drugs that the patients are receiving?

DR. HOLT I did not say they were albumin bound, I said they were of similar size. I think we can exclude the effect of drugs. We find similar effects in, say, pregnancy where there are no drugs being given, and we have dialysed the serum and after dialysis it is still the same. Further, it is rapidly reversible, which is a little against drug effect. I would say we have gone a reasonable way towards excluding this possibility.

DR. P. A. BACON (*Bath*) A couple of years ago I presented some evidence that in both RA and SLE there were large lymphocytes in the blood which in autoradiography were shown to be spontaneously transformed cells (Bacon, Crowther, and Sewell, 1971). Do these cells in fact rosette or do they contribute to your low number of peripheral 'T' cells?

DR. HOLT The labelled cells do not form rosettes.

References

Bacon, P. A., Crowther, D., and Sewell, R. (1971) *Proc. VII European Rheumatology Congress*, Brighton, 1971.

Comparison of ultrasound and positive contrast arthrography in the diagnosis of popliteal and calf swellings. By H. MEIRE, D. J. LINDSAY, D. R. SWINSON, and E. B. D. HAMILTON (*King's College Hospital, London*)
Published in full in the *Annals* 1974, 33, 221.

Discussion

DR. J. M. GUMPEL (*Northwick Park*) At Northwick Park I have had the privilege of working with radiologists who are very interested in soft tissue shadows and have been surprised how often on a plain lateral radiograph of the knee they have predicted that I will have found or should have found a Baker's cyst. Have you compared your findings with plain x-rays of the knees, to assess whether you could have seen a Baker's cyst?

DR. SWINSON We have not compared it with soft tissue x-rays. We have used it in patients with suspected rupture of the cyst and have found it useful, though these patients were not in the results.

DR. M. I. V. JAYSON (*Bristol and Bath*) I think that one should point out that when we (Genovese, Jayson, and Dixon, 1972) examined a series of rheumatoid knees routinely by arthrography we found that over 90% of them had popliteal cysts, so that I think that you are quite likely to find them in any series in which you are looking for them. I just wonder how much this technique depends upon the actual pressure within the cyst? With a low pressure cyst which is difficult to detect clinically, might you find it difficult to detect it by ultrasonic scan because you do not have a nice tense surface under pressure to reflect the ultrasonic beam?

DR. SWINSON I think it depends principally on the size of the cyst. As long as it has fluid in it you have an area of different density to the structure around it and therefore it should show up if it is a reasonable size, say 2 cm.

Reference

Genovese, G. R., Jayson, M. I. V., and Dixon, A. St. J. (1972) *Ann. rheum. Dis.*, 31, 179

Atlanto-axial Subluxation—a 5-year Follow-up Study in Rheumatoid Arthritis. By J. A. MATHEWS (St. Thomas's Hospital, London) To be published in full in the *Annals*.

Rheumatoid Discitis in the Thoracic Region due to Spread from Costovertebral Joints. By E. G. L. BYWATERS (*M.R.C. Rheumatism Unit, Taplow and Royal Postgraduate Medical School, London*)

A detailed dissection of the rheumatoid spine shows lesions in thoracic discs due to spread from adjacent costovertebral (diarthrodial) joints. This has not hitherto been recorded clinically, radiologically, or pathologically. The process is essentially similar to that shown by Ball (1964) for the cervical discs where there is spread from the oncovertebral joints. Lesions in the lumbar spine previously described radiologically (Lawrence and Sharp, 1964) can be seen to be due to rheumatoid invasion of a degenerate disc.

Discussion

DR. J. BALL (*Manchester*) I would like to congratulate Prof. Bywaters on an excellent illustration of the thoracic lesions. I can certainly confirm that arthritis of costo-