

## Discussion

DR E. G. J. OLSEN: I was interested in your comments on the differential diagnosis, it is perhaps worth pointing out that Somers, D'Arbella and co-workers in Uganda (Somers *et al.*, 1971) many years ago were, in fact, the first workers to use the biotome technique outside Japan. They described something like 70 cases and they were among the first to advocate this investigation in the diagnosis of EMF and rheumatic heart disease.

PROF. GOODWIN: Right-sided involvement has not been described in the literature of Europeans with EMF who lived in the tropics. However, in people with endomyocardial disease and eosinophilia whom we have studied from temperate climates, biventricular disease is very common.

CHAIRMAN: Yes, we have the same impression. Biventricular is the most common and left-sided the next common and we have only one case of a lone right-side involvement. I know there are differences in Nigeria. That is the reason why, in this material, we have assigned great value to the presence of a prominent a wave as a manifestation of a constrictive syndrome of the right side, biventricular involvement, pulmonary hypertension or, of course, diminished compliance of the right ventricle.

DR A. O. FALASE: In our experience, right ventricular EMF is commonest, followed by biventricular and then left ventricular.

DR OLSEN: In your experience how reliable is angiography and echocardiography?

PROF. GOODWIN: I think, in the early stages, angiography is of very little value. I don't know how valuable echocardiography is, but, in the later stages, angiography is extremely valuable because when one looks at the cine-angiogram, the ventricle is contracting strongly yet it has very characteristic

filling defects, a most important feature. We must distinguish EMF from the other causes of diastolic heart disease, but it is a relatively rare disorder and I would certainly look to echocardiography to give us a more definite answer to diagnosis in the early stages.

If you have somebody with a heart which is not obviously enlarged, but who has a disproportionately high venous pressure, you should think of a diastolic disease. I did not mention the electrocardiogram because it is nonspecific, but it is quite different from that, for example, in hypertrophic cardiomyopathy. At the moment apart from the angiogram in the advanced case of EMF, and, possibly the echo in the earlier phases, biopsy will give an exact answer in the earlier stages.

PROF. C. DUBOST: Constrictive pericarditis can cause problems with diagnosis.

PROF. GOODWIN: I agree.

DR OLSEN: At a recent meeting, a similar question was raised and my suggestion for the diagnostic approach was: a microscope, a pin and a glass slide. Early cases may be detected by looking for degranulation of eosinophils.

PROF. GOODWIN: I think that perhaps what you say is true, but is it as easy as you imply to pick up degranulation? At the present time, I do not think we have any right to say degranulation equals EMF.

## Reference

- SOMERS, K., HUTT, M.S.R., PATEL, A.K. & D'ARBELLA, P.G. (1971) Endomyocardial biopsy in diagnosis of cardiomyopathies. *British Heart Journal*, 33, 822.