

# Heberden Society

## Annual General Meeting, 1969

The following papers were presented at the annual general meeting on November 21 and 22, 1969.

**Retrospective Clinical Survey of 354 Cases of Gout.** By R. GRAHAME and J. T. SCOTT (*Royal Postgraduate Medical School and Kennedy Institute of Rheumatology, London*).

Between the years 1958 and 1967, a series of 354 gouty patients was examined and investigated by one or both of the authors at one of three London hospitals: Hammer-smith, Charing Cross, and West London. The information for the survey was abstracted from the case records and recorded on a proforma which permitted 100 items of data to be assembled for each patient. These were then fed into a computer which cross-referenced each of these items with all the others, enabling the incidence of one feature in relation to any other feature to be readily assessed. The 5,000 items of information so obtained have been scrutinized and form the basis of this survey.

The data confirm what is already well-established knowledge concerning gout, such as the distribution of age at onset, the incidence of individual joint involvement, the comparatively high incidence of obesity, regular intake of alcohol, hypertension, proteinuria, and renal impairment, and the preponderance of gouty patients in the higher social classes.

A number of interesting and hitherto unrecorded facts came to light concerning the relationship between hypertension, renal failure, age at onset, and duration of disease.

### Discussion

PROF. E. G. L. BYWATERS (*Taplow*) One of the most interesting non-results of this interesting study is the failure to correlate hypertension or uraemia with duration of disease. It seems to me that this apparent negative correlation might be due to your sampling techniques. You have a good representation of gouty patients in the first 10 years of the disease, but a very poor proportion of that gouty population who have lasted longer than 10 years from onset; those in that latter group who are missing from your sample may well have died already from hypertension or uraemia or may already be under affective treatment elsewhere, having been recognized because of their referral for hypertensive treatment. A

comparison therefore of hypertension between these different age-from-onset groups is vitiated by their essential non-comparability.

DR. GRAHAME I think the sample of patients was biased towards those with shorter duration of disease by reason of anno domini. I think the patients' ages may have been operating here just as much as the other factors referred to by Prof. Bywaters.

DR. J. S. LAWRENCE (*Manchester*) How helpful did you find the computer analysis in a study of this magnitude? You must have had a vast amount of results to wade through after the computer had done its work. Did you feel it was all really worth it?

DR. GRAHAME Whether it was all really worth it I would prefer to leave to the audience to decide, but certainly we should not have been able to analyse the data as we did without the help of the computer. There were problems in sorting out the data received from the computer; but the computer was certainly invaluable to our minds.

PROF. J. H. KELLGREN (*Manchester*) How meaningful is disease duration in this study? I take it that 'duration' refers to the interval since the onset of articular gout or manifest renal stones, but the metabolic disease had presumably been going on for quite a long time before that and might have been affecting the kidneys in a silent way. It is not as if the hyperuricaemia and the hyperuric acid excretion started on the day when the first attack of gout occurred. I wondered if you had taken that into account?

DR. GRAHAME We had no way of detecting the onset of hyperuricaemia in these patients. We had to fall back on the onset of clinical gout, but work from the Tecumseh study shows that the liability to gout seems to be directly related to the level of the uric acid, so perhaps this was not all that unreasonable.

**Factors affecting the Binding of Urate to Plasma Proteins.** By R. BLUESTONE, I. KIPPEN, J. R. KLINENBERG, AND W. M. WHITEHOUSE (*The Department of Medicine, University of California School of Medicine*)

The ability of human plasma proteins to bind uric acid has been demonstrated by several techniques. Although the physiological significance of these observations has