Is Membranoproliferative Glomerulonephritis Really Decreasing?

A Multicentre Study of 1,548 Cases of Primary Glomerulonephritis

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Dear Sir,

Jungers et al. [2] were the first to report that the incidence of membranoproliferative glomerulonephritis (MPGN) in primary glomerulonephritis (GN) showed a progressive reduction in the last decade; this was later confirmed by other authors [1,3]. In order to verify this observation and to characterize the variation of MPGN incidence with time, we reviewed 1,548 renal biopsies from patients with primary GN examined at three Neph-rology Units in Milan from January 1972 to December 1983. The series included: 286 cases of focal glomerulo-sclerosis (FGS), 315 membranous GN (MGN), 185 diffuse proliferative GN (AGN), 101 diffuse crescentic GN (GGN), 457 IgA nephritides (IgA GN) and 204 MPGN. GN secondary to systemic diseases were excluded. Im-munofluorescence examination was performed in almost all the cases.

To obtain more homogeneous diagnostic criteria and to avoid diagnosis discrepancies due to technical factors, we excluded: (a) biopsies performed prior to 1972, (b) cases with minimal changes, (c) advanced sclerosing GN, (d) unclassifiable forms.

Statistical analysis was performed by the χ^2 -method. To simplify the analysis, comparison was made between 3 periods of 4 years each. The number of MPGN was found to decrease progressively with time, in spite of the increased total number of patients submitted to biopsy (table I). Analysis of modifications of other GN showed

Table I. Distribution of primary GN during the 1972–1983 period, divided into 3 periods of 4 years each

that only FGS increased significantly for the third period compared with the second.

The incidence of MPGN (21, 14 and 6% for the 3 periods, respectively) was significantly lower for each of the periods when compared with the preceding one ($p < 0.01$ for period I vs. II, and $p < 0.001$ for II vs. III).

Considering MPGN types I and II separately, the number of the former decreased, whereas that of the latter remained unchanged (table I). No significant difference between the 3 periods was observed regarding sex, age, nephrotic syndrome or hypocomplementaemia at time of biopsy.

These observations agree with a study

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performed in Paris [2] as well as one performed in a French rural area [3]. The reason for the decrease of type I MPGN is unclear. Exogenous or environmental factors influencing large population areas such as a possible decrease of aetiological agents can be postulated.

References

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