SHORT REPORTS

Membranous glomerulonephritis, dermatomyositis, and bronchial carcinoma

Membranous glomerulonephritis is associated with malignant disease in about 10% of cases.¹ The prevalence of neoplasia in patients with dermatomyositis is estimated at 15-20% in those aged over 45.² The occurrence of membranous glomerulonephritis with dermatomyositis is extremely unusual and in the one documented case malignancy was not implicated.³

Case report

A woman aged 58 years presented with ankle swelling and proteinuria. She smoked 20-30 cigarettes a day, was taking no medication, and was normotensive. Urine microscopy showed red cells with granular and cellular casts. The proteinuria was selective and amounted to 5.2 g/24 h. Serum concentrations were as follows: albumin 25 g/l, urea 6.8 mmol/l (41 mg/100 ml), and creatinine 129 μ mol/l (1.46 mg/100 ml), ESR 50 mm in 1 h, and C3 1.28 U (0.8-1.4). A renal biopsy specimen showed diffuse capillary loop thickening and basement membrane spikes (figure). Immunofluorescence showed granular

Renal glomerulus showing basement membrane spikes. Silver stain $\times 350$ (original magnification).

IgG deposition along capillary loops. The features were typical of membranous glomerulonephritis. Treatment with frusemide was started.

Three years later she developed dermatomyositis with periorbital oedema; dusky erythema of the face, trunk, and hands; proximal muscle weakness; and dysphagia. The serum concentration of creatine phosphokinase was 290 U/l (10-60), aldolase 3.6 U/l (0.5-3.0), and lactate dehydrogenase 760 U/l (50-220). The proteinuria had diminished to 0.7 g/24 h, and serum concentration of albumin was 29 g/l, urea 9 mmol/l (54 mg/100 ml), creatinine 105 μ mol/l (1.1 mg/100 ml), and ESR 60 mm in 1 h. Antinuclear antibody was not detected. A chest radiograph was normal but lung tomography showed a 1-cm opacity in the right mid-zone. An oat cell tumour was later resected with the upper lobe. Preoperative treatment with prednisone and azathioprine dramatically improved the dermatomyositis and this improvement was sustained when the drugs were stopped postoperatively.

Comment

The presence of both membranous glomerulonephritis and dermatomyositis in a cigarette smoker strongly suggested an underlying malignancy. Membranous nephropathy is thought to be an immune complex disease. The renal lesion in this patient may have resulted from the deposition of immune complexes induced by the tumour.¹ Circulating immune complexes tend to be found early in the course of malignant disease and an associated nephropathy may precede the discovery of a tumour by over one year.⁴ Although the pathogenesis of dermatomyositis is not clear, the link with cancer may provide a clue. This association perhaps results from an immune

response to tumour antigen which cross-reacts with muscle. Both humoral and cell-mediated mechanisms may participate.⁵ In our patient the nephropathy had already improved when the dermatomyositis first appeared. If both conditions were precipitated by tumour antigen this disparity in time course suggests that their pathogenic mechanisms differ.

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¹ Row, P G, *et al*, *Quarterly Journal of Medicine*, 1975, **44**, 207.

² Bohan, A, *et al*, *Medicine (Baltimore)*, 1977, **56**, 255.

³ Fukui, H, *et al*, *Japanese Journal of Nephrology*, 1976, **18**, 523.

⁴ Eagen, J W, and Lewis, E J, *Kidney International*, 1977, **11**, 297.

⁵ Pearson, C M, and Bohan, A, *Medical Clinics of North America*, 1977, **61**, 439.

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Current trends in contraception

Recent evidence^{1,2} of mortality and morbidity among women taking oral contraceptives has been widely and often sensationally reported in the press. Fortunately this was countered by the clear, balanced recommendations of the presidents of the Royal College of General Practitioners and the Royal College of Obstetricians and Gynaecologists.³ To assess the impact of these developments we analysed the contraceptive trends over the last four years in a large family planning clinic in our area.

Methods and results

The Palatine Centre is the largest family planning clinic in the Manchester area, with 11 000 first-visit patients and a total of 26 000 consultations each year. The contraceptive trends during the years 1975-8 inclusive, which covered the relevant period, were analysed. The age grouping of first-visit patients each year (table) shows a fairly constant distribution with only 8% aged over 35. There was a small decrease, from 21% to 17%, in patients aged under 20 seeking contraceptive advice. The figures for the contraceptive method being used by patients at their first visit in each year clearly show a trend away from the pill (from 83% to 73%) over the four years, with a corresponding move towards the IUCD (6% to 9%), cap (5% to 8%), and condom (3% to 5%), which is statistically significant with such large figures. During 1977 this trend appears to have accelerated. The IUCD and cap seem to have substantially taken up the ex-pill users. Additionally there has been a steady increase each year in condom users.

Ages of first-visit patients and their contraceptive methods

Year	No aged under 20	No aged 20-35	No aged over 35	Total patients	Contraceptive method			
					Oral	IUCD	Cap	Condom
1975	2407	7980	875	11 338	9374	697	561	320
1976	2454	8420	953	11 827	9481	817	702	381
1977	2235	8637	909	11 781	9368	895	764	439
1978	1951	8514	923	11 388	8363	1050	942	548

Discussion

This trend away from the pill corresponds to that found in a similar study in the United States,⁴ although that reported figures only up to 1976. The major move away from the pill occurred in the subsequent two years in our study. Furthermore, the American report showed a small decrease in the use of the IUCD, which did not occur in Manchester. The significant movement away from the use of hormonal contraceptives in this group of women, most of whom were below the age of