

and 10 of the men and 12 of the women had been receiving psychiatric care. Psychiatric treatment had been mainly for depression but four of the men had been diagnosed as schizophrenic. In only one out of 36 cases where details were available was there no history of psychiatric or personality disorder.

In none of the cases was there any suggestion that the suicide was intended as a political protest.

Comment

A statistical association has recently been shown⁵ between reports of inquests on suicide victims in a local paper and the subsequent suicide of men under 45 years of age; the appropriateness of sensational handling of suicide by the media has again been questioned. It seems reasonable to suggest that at least the choice of method in the suicides reported here was influenced by the publicity surrounding the index cases.

It is too early to say whether burning as a method of suicide has now passed the point of being an occasional aberration in the statistics, but in the meantime it would seem reasonable to encourage the press to take a responsible attitude to the presentation of these cases—which without much doubt must entail very painful deaths and have a profound effect on relatives and friends. A more detailed examination of these cases is in progress.

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³ *Guardian*, 12 October 1978.

⁴ *The Times*, 24 November 1978.

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Smoking and renal artery stenosis

Cigarette smoking appears to be commoner in patients with malignant-phase hypertension than in the general population or in patients with non-malignant hypertension.^{1,2} We have also found an excess of smokers among premenopausal women with hypertension and ischaemic heart disease.³ We report a study of the smoking habits of 85 hypertensive patients with renal artery stenosis.

Patients, methods, and results

Between 1968 and 1979 we investigated 85 patients—46 women (mean age 41.5 years) and 39 men (mean age 43.9 years)—with arteriographic evidence of stenosis or occlusion of one or both renal arteries. All had a diastolic blood pressure of 100 mm Hg or over when they presented as outpatients; 22 were in the malignant phase¹ (mean (\pm 1 SD) diastolic pressure 142 \pm 14 mm Hg); the remaining 63 had non-malignant hypertension (mean diastolic pressure 119 \pm 14 mm Hg); 44 had stenosis of a main renal artery (bilateral in 7 patients); and 18 an occluded renal artery (with contralateral stenosis also in 5). Fibromuscular hyperplasia was diagnosed by arteriography in 23 patients (21 women)—six had bilateral lesions. In six this diagnosis was confirmed histologically. Ureteric catheterisation studies of 65 patients showed features characteristic of unilateral renal artery stenosis⁴ in 52. The remaining 13 had bilateral renal artery lesions. Data on smoking habits were obtained as before.¹ Ex-smokers were classified as non-smokers. There were no pipe smokers.

The 63 patients with non-malignant hypertension and renal artery stenosis were matched for age (\pm 1 year) and sex with 63 patients with non-malignant hypertension randomly drawn from a group (control group A) of 893 patients attending the Glasgow Blood Pressure Clinic.⁵ The smoking habits of these controls, whose mean blood pressure was 122 \pm 16 mm Hg, were examined for comparison. Each of the 63 patients with non-malignant hypertension and renal artery stenosis was also matched for age (\pm 3 years) and sex with a patient seen in our wards with non-malignant hypertension

and no pyelographic evidence of a renal lesion.⁴ The mean diastolic blood pressure of these patients (control group B) was 120 \pm 14 mm Hg. Their smoking habits were also examined. Smoking habits in patients with renal artery stenosis and in controls are noted in the table.

Smoking habits in 63 patients with non-malignant hypertension and renal artery stenosis and in two control groups. Footnotes show significance of differences comparing renal artery stenosis with the appropriate control groups. Both control groups comprised patients with non-malignant hypertension not associated with renal artery disease

	Renal artery stenosis		Control group A		χ^2	Control group B		χ^2
	No	%	No	%		No	%	
All patients (n=63)								
Smokers	53	84	28	44	21.60†	29	46	20.11†
Non-smokers	10	16	33	56		34	54	
Men (n=27)								
Smokers	24	89	14	52	8.88†	13	48	10.39†
Non-smokers	3	11	13	48		14	52	
Women (n=36)								
Smokers	29	81	14	39	12.99‡	16	44	10.01†
Non-smokers	7	10	22	61		20	56	
Fibromuscular hyperplasia (n=18)								
Smokers	13	72	7	39	4.05*	8	44	2.86(NS)
Non-smokers	5	28	11	61		10	56	
Renal artery occlusion (n=13)								
Smokers	13	100	6	46	9.58†	5	38	11.56†
Non-smokers	0	0	7	54		8	62	
Atheromatous stenoses (n=32)								
Smokers	27	84	15	47	9.97†	16	50	8.58†
Non-smokers	5	16	17	53		16	50	

* P < 0.05. † P < 0.01. ‡ P < 0.001. NS = Not significant: P > 0.05.

Comment

Smoking was nearly twice as common in patients with non-malignant hypertension and renal artery stenosis as in those in the control groups with non-malignant hypertension of comparable severity (table). The differences were significant for men and women separately and together and for the subgroups with renal artery occlusion, with fibromuscular hyperplasia, and with renal artery stenosis due to atheroma when each of these was considered separately. In earlier studies^{1,2} excess smoking was noted in malignant-phase hypertension. This study now shows a close association with smoking in patients in the malignant phase with accompanying renal artery stenosis (20 out of 22 such patients smoked). The prevalence of smoking in the present control groups was similar to that seen in a population sample drawn from the Glasgow area and also in other control groups.¹ This and the difference in smoking habits even between the subgroups of renal artery stenosis and controls make it likely that the observed excess of smoking in renal artery stenosis is genuine. Cigarette smoking has now been linked with vascular disease, usually atheromatous, in the heart, brain, peripheral circulation, eye,¹ and kidney. The probable causal relationship between smoking and arterial disease has been discussed elsewhere.⁴ Hypertensive subjects who smoke thus incur two separate and cumulative risks of vascular disease. Moreover, because renal arterial lesions can per se lead to a further rise in blood pressure their development will be likely to have particularly adverse consequences. Therefore, we believe that our findings are a further indictment of smoking.

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