Oral Contraceptives and Thrombo-embolic Disease

SIR,—Dr. M. P. Vessey and Dr. Richard Doll (27 April, p. 199) presented data showing that thromboembolic patients were on the average heavier cigarette smokers than control patients, but discounted the difference as being statistically not quite significant. They further stated that their data provided no evidence that smoking could have accounted for the association between the use of oral contraceptives and the development of thromboembolism.

Their data do indicate an association between use of oral contraceptives and thromboembolism. By ignoring contraceptive use in their chi-square analysis of the statistical significance of the association of smoking and thromboembolism, Dr. Vessey and Dr. Doll may have overlooked a potentiating effect of cigarette smoking on any aetiological role of oral contraceptives relative to thromboembolism. Such potentiating effect is suggested when their data are retabulated to facilitate evaluation of possible separate or combined effects of smoking and oral contraceptives on thromboembolism. The data indicate a possible role of smoking in the pathogenesis of thromboembolism in combination with the use of oral contraceptives (Table 1).

TABLE 1.—Relative Distribution of Thrombo-embolic and Control Patients by Use of Oral Contraceptives and Number of Cigarettes Smoked

Oral Contraceptives	Number Cigarettes Smoked per Day	Thrombo-embolic Patients (n=58)	Control Patients (n=116)	Ratio of Thrombo-embolic to Control Patients
Not used	0-14	43.1%	72.4%	0.6 to 1
Not used	15+	12.1%	19.0%	0.6 to 1
Used ..	0-14	20.7%	6.9%	3.0 to 1
Used ..	15+	24.1%	1.7%	14.2 to 1

Source of basic data: Vessey, M. P., and Doll, R. Investigation of Relation between Use of Oral Contraceptives and Thromboembolic Disease. *Brit. med. J.*, 1968, 2, 199.

Moreover, retabulation of the data indicates the lack of association between use of oral contraceptives and smoking in the control patients (Table II).

TABLE II.—Observed and Expected Distributions of Control Patients by Number of Cigarettes Smoked and Use of Oral Contraceptives

Number of Cigarettes Smoked	Oral Contraceptives			
	Not Used		Used	
	Observed	Expected	Observed	Expected
0-14	84	84.1*	8	7.9
15+	22	21.9	2	2.1

Source of basic data: same as Table 1.

*84.1 = $\frac{(84 + 22)(84 + 8)}{(84 + 22 + 8 + 2)}$

The U.S. Public Health Service has reported that cigarette smoking may cause an acceleration of the *in vitro* thrombus formation of human blood.^{1,2} Platelet adhesiveness, as measured by *in vitro* tests, also appears to be increased by cigarette smoking. The Public Health Service cites findings that platelet survival time is shortened, and that platelet turnover rate is increased in smokers. There is also an increased tendency for the platelets to adhere to the vascular endothelium.

Unless and until a potentiating effect of cigarette smoking on any aetiological role of oral contraceptives can be ruled out, our findings suggest that it would be prudent to consider heavy smoking as a contraindication to the prescription of oral contraceptives.—We are, etc.,

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REFERENCES

- ¹ *The Health Consequences of Smoking. A Public Health Service Review, 1967, Public Health Services Publication No. 1696, Revised, 1968. Washington, D.C.*
- ² *Supplement to Public Health Service Publication No. 1696, 1968. Washington, D.C.*

Squatting in Heart Disease

SIR,—In your leading article (23 November, p. 470) you use the term squatting as synonymous with the knee-chest position. The genu-pectoral posture was described long before squatting was recognized in cyanotic congenital heart disease as characteristic of acute pericardial effusion. It was originally applied to the attitude of the Mohammedan's prayer described by Zehetmayer in 1845, later by Hirtz, and well portrayed by Blechmann.¹ However, it was more often applied to the posture adopted by children with pericardial effusion confined to bed in hospital; the child sits up, leaning forwards with the knees drawn up to the chest, and with the head and arms resting on the knees—as portrayed by Blechmann—and I have seen children asleep in this position, which is not identical with squatting, though the French term "accroupissement" (translated in the dictionary as squatting) is used for both. Squatting is usually practised by cyanotic children who are ambulant, and appears when they first start to walk. The genu-pectoral posture is encountered in children confined to bed with acute pericardial effusion, and they often fall asleep in this position.

Though Dr. Helen Taussig herself used both terms, the novelty of her discovery was the squatting posture in ambulant cyanotic children as a means of relieving respiratory distress provoked by exercise. I venture to suggest that the term genu-pectoral should be preserved for the posture encountered in pericardial effusion, and that the term squatting should be applied to the posture of children with cyanotic congenital heart disease in which Dr. Taussig first described it.—I am, etc.,

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REFERENCE

- ¹ Blechmann, G., *Les Péricardites Aiguës*, 1922. Paris.

Damages against Doctors

SIR,—In Mr. G. H. Alabaster's letter (30 November, p. 576) he says that when he reads "from time to time reports on cases in which doctors have been ordered to pay heavy damages, despite good intention" he has been "led to wonder whether the best is

being made out of the defence in action for malpraxis . . ." either by individual doctors, ". . . or by the medical profession as a collective body."

However, in the *Lancet* as recently as 16 November¹ a reviewer was writing: "Reading the annual reports of the medical defence organizations it is hard not to sympathize with some of the patients who incautiously try to sue their doctors. In short, one sometimes wonders guiltily whether the profession is too ably represented." Perhaps this oblique tribute to the defence societies will reassure Mr. Alabaster, even if his letter does not have any reciprocal effect on the *Lancet's* reviewer.

Mr. Alabaster also refers to "the tremendous burden of mind which a doctor must endure who is threatened with a legal penalty of possibly obliterative dimensions." Inevitably, a doctor accused of professional negligence is distressed, but if he is a member of a defence society he certainly need not feel threatened by an overwhelming legal penalty, for he is wholly indemnified against all costs and damages. The doctor defendant is often conscious of human ingratitude, but sometimes without any gross carelessness a patient suffers grievously by reason of human fallibility. Wisely, the law in civil claims does not distinguish between varying degrees of culpability, but awards damages to the plaintiff strictly related to any harm or injury suffered when it has been adjudged that the doctor or doctors have not exercised reasonable skill and care. It should not be necessary to remind doctors that standards in this respect are set by the profession itself, and judge or jury determine these matters on the basis of expert medical evidence tendered on behalf of defendant and plaintiff.

The foregoing paragraphs were written before Professor M. F. A. Woodruff's letter was published in the *B.M.J.* (7 December, p. 643), but what he says emphasizes how important it is that doctors should have an informed and balanced appreciation of their obligations to patients, colleagues, and the community. It is perhaps a pity that Professor Woodruff's hope has not been realized—namely, that his university might appoint a professor of forensic medicine, "who would devote a substantial part of his time and energy to developing joint research by doctors and lawyers" in this field. As yet not all medical faculties and teaching hospitals include in their forensic medicine courses lectures devoted specifically to the subject, but the Medical Protection Society has through its president over the past years let the deans of medical schools know that the Society itself is ever ready to provide suitable lecturers.—I am, etc.,

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REFERENCE

- ¹ *Lancet*, 1968, 2, 1088.

Rickettsial Endocarditis

SIR,—The account of four cases of rickettsial endocarditis described in the Clinico-pathological Conference (5 October, p. 40) is of great interest and prompts me to record the following brief case history.

A 38-year-old schoolmaster working in Western Nigeria developed recurrent attacks