

TABLE VII.—AVERAGE DEVIATIONS OF STATED WEIGHTS FROM STANDARD WEIGHTS (NUMBER OF PATIENTS SHOWN IN PARENTHESES)

Diagnostic group	Average deviation from standard weight (lb.)		All women
	Oral contraceptives		
	Used	Not used	
Thromboembolism.....	+7.4 (24)	+12.9 (31)	+10.5 ¹ (53)*
Control.....	+7.1 (10)	+3.0 (103)	+3.4 ¹ (113)*
Both groups.....	+7.3 (34)	+5.3 (134)	+5.7 (168)

¹ Weight not known for 3 patients in each diagnostic group.

TABLE VIII.—PREVALENCE OF CIGARETTE SMOKING IN AFFECTED AND CONTROL PATIENTS (NUMBER OF PATIENTS IN EACH CLASS IS GIVEN WITH PERCENTAGES IN PARENTHESES)

Diagnostic group	Oral contracep- tives	Number of cigarettes smoked at onset of episode			Total no. of patients	Mean No. of cigarettes smoked
		0	1-14	15+		
Thromboembolism.....	Used.....	8(31)	4(15)	4(54)	26(100)	15
	Not used.....	11(34)	14(44)	7(22)	32(100)	7
	Total ..	19(33)	18(31)	21(36)	58(100)	11
Control.....	Used.....	3(30)	5(50)	2(20)	10(100)	7
	Not used.....	49(46)	35(33)	22(21)	106(100)	7
	Total ..	52(45)	40(34)	24(21)	116(100)	7

Comparison between affected patients and controls, $\chi^2=5.13$, $n=2$, $0.10>P>0.05$.

The data summarized in Tables VI, VII and VIII provide no evidence that previous attacks of disease, obesity, or smoking could have accounted for the association between the use of oral contraceptives and the development of thromboembolism. They accord with other experience suggesting that the risk of thromboembolism is increased by previous attacks and by obesity (Coon and Collier, 1959b; Fleming and Bailey, 1966) and that the use of oral contraceptives tends to increase weight (World Health Organization, 1966).

ias in diagnosis

An alternative explanation of the results is that a history of the use of oral contraceptives led to the recognition of thromboembolic disease which would otherwise have been missed. It is easy to overlook the diagnosis of both deep vein thrombosis and pulmonary embolism (Coon and Collier, 1959a; Medd and McBrien, 1962; Hamilton and Thompson, 1963; Richards, 1966), and the reports of thrombosis in women who used oral contraceptives, which began to appear in British medical journals in 1961, will have alerted doctors to the possibility of its occurrence.

If this were the explanation, the strongest association should be found in those patients for whom the diagnosis was least evident, as this group would contain patients whose condition was diagnosed only because they were known to have been using oral contraceptives. We have therefore sought to test this hypothesis by classifying the affected patients according to the confidence placed in the diagnosis. For this purpose we made detailed summaries of the records of all 61 affected patients, omitting reference to their contraceptive practice, and submitted these summaries to a colleague (Dr. Frank Speizer), who classified the diagnoses as "possible," "probable," or "certain." No patient was classified as certainly having deep vein thrombosis alone, because none had been submitted to phlebography or vascular surgery (Haeger, Nilsson, and Robertson, 1967). No patient was diagnosed as possibly having both deep vein thrombosis and pulmonary embolism, as the combination of signs in the leg