

sources of material for estimating the use of oral contraceptives in the general population, are in close agreement.

II. CEREBRAL THROMBOSIS

Women who were treated in hospital for cerebral thrombosis should have been recorded in the hospital diagnostic index under *International Classification of Diseases* rubric 332. This diagnosis, however, is difficult to establish accurately and some cases could be classified under other heads. All case notes were therefore examined relating to diagnoses coded under other rubrics for cerebrovascular disease—that is, numbers 331 to 334—for the period 1964–6. A preliminary check showed that patients coded under rubric 330 (subarachnoid haemorrhage) almost always had blood-stained cerebrospinal fluid, and this rubric was omitted. At three hospitals the diagnostic indexes provided incomplete information about the sex and age of the patients. It was impracticable to review all the notes coded 331 to 334 at these hospitals and our results relate only to patients treated at the other 16.

Firstly, all notes excluded relating to women who were single or widowed, postmenopausal, sterilized, pregnant, or puerperal, or had a predisposing condition adequate to account for the development of a cerebrovascular disturbance. Secondly, notes were excluded which related to episodes where there was proof that the diagnosis was one of haemorrhage or which were obviously not due to cerebral thrombosis. Abstracts of the remaining 16 sets of notes were then prepared and were reviewed by a neurologist (Dr. Gerald Stern) without knowledge of the patients' contraceptive practice. Nine patients were accepted as having had a cerebral thrombosis, but the diagnosis was regarded as certain (angiographic evidence of arterial occlusion at a site which could be related to the focal signs) in only two.

The nine patients were interviewed in their homes (five) or completed postal questionnaires (four) in the same way as the patients suffering from venous thrombosis or pulmonary embolism. Five (including one in whom the diagnosis was certain) had been using oral contraceptives during the month before they became ill and for periods ranging from one week to four years previously.

For comparison we have used the control patients selected to match the women with venous thromboembolic disease. Of these, 10 out of 116 used oral contraceptives (see Table IV), so that the crude number expected among the women with "cerebral thrombosis" would have been less than one (0.8). If account is taken of the age, parity, and year of admission of the women with "cerebral thrombosis" the expected number (1.0) is hardly altered. Even with these few patients the difference between the observed and the expected numbers of women using oral contraceptives is statistically significant ($P < 0.01$).

III. CORONARY THROMBOSIS

It was again impracticable to review all the notes coded under *International Classification of Disease* rubric 420 (arteriosclerotic heart disease, including coronary disease) at three hospitals, because the diagnostic index was incomplete and our results relate only to patients treated at 16 hospitals during the period 1964–6.

All notes were excluded relating to women who were single or widowed, postmenopausal, sterilized, pregnant, or puerperal, or had a predisposing condition; the remainder were classified into three diagnostic groups—angina pectoris only, possible coronary thrombosis (only ST or T changes in the electrocardiogram, but showing progression; serum enzymes either not done or offering no support to the diagnosis), and certain coronary thrombosis (pathological Q waves in the electrocardiogram or only ST or T changes accompanied by supporting serum enzyme changes). None of the notes relating to patients in these categories made any mention of oral contraceptives; there was therefore no risk of bias, and the classification was made without reference to others.

Sixteen women were accepted as having had coronary thrombosis without predisposing cause. Three had died and were excluded from the study because they could not be interviewed; of the remainder, the diagnosis was regarded as certain in four. All 13 patients were either interviewed (12) or had completed a postal questionnaire (1), and none had taken oral contraceptives during the month before the onset of their disease. The number expected to have done