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aches were relieved when the synthetic steroids were discontinued.

In another group of 6 patients, however, Shafey and Scheinberg found that in 5 cases the headaches were premonitory to the development of cerebral thromboses. Gardner and his associates strongly emphasized the danger of women continuing contraceptive medication if they exhibit evidence of craniovascular sensitivity. Among 9 patients in whom strokes developed, all had headache as a warning. the Neurological Institute of New York angiographic series, 6 of the 8 patients had prodromal symptoms (TABLE II). In the group, 5 had headaches related to taking medication prior to the onset of paresis, 1 patient without headache had transient visual disturbances and dysesthesia of the In 3 of the 5 patients with headache, additional warnings included: transient cerebral ischemic attacks, 1 case; transient visual disturbances, 1 case; a family history of both father and mother having died of strokes, 1 case.

## COMMENT

It would appear that, in respect to shortterm effects, the oral contraceptives are safe for the vast majority of users. certain small percentage, however, the medication carries with it the danger of thromboembolic disease, including cerebral thrombosis. The present report of cases is small in number because a representative twelve-month period was chosen to compare with earlier observations during a similar interval of time. Numerous additional cases could now be added. At the present time, the common denominator in almost every case of cerebral arterial occlusion demonstrated angiographically in young women is the contraceptive pill.

The majority of women in whom cerebral thrombosis develops from contraceptive medication exhibit prodromal symptoms. The development of headache, visual symptoms, or other signs of transient cerebrovascular insufficiency should probably be interpreted as an indication for the immediate and permanent cessation of oral contraception in such individuals. this is no guarantee that the clotting mechanism will revert to normal. cases of pulmonary embolism, one fatal, have been observed among the patients in whom medication had been withdrawn for a number of weeks.

## SUMMARY

Eight cases of cerebral arterial occlusion have been added to the growing list of complications resulting from the use of oral contraceptives. The series is unusual in that all cases had angiographic verification of a well established clinical diagnosis, and the patients were admitted to a general neurological service during a twelve-month period. Comparison with figures for a year before the widespread use of oral contraceptives reveals an eightfold increase in The majority of patients with incidence. cerebral thrombosis developing from contraceptive medication have some warning, most often significant headache, prior to the onset of the paretic event and presumably sufficiently in advance to avert a stroke through the cessation of medication.

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