

patients are the only ones in the author's experience who have ever told so dramatically of their fear of suicide. After the pills were omitted, the depression and suicidal fears of the three patients disappeared, as did the depression of the other patients in Table I.

The *central nervous system symptoms* (table II.) of severe vertigo, headache or nausea and malaise have been encountered in four patients. The symptoms were disabling until the pills were omitted. Since then the symptoms have subsided.

An *alteration of menstrual function* after the pills have been omitted has been reported occasionally by other authors. Five patients with this complication are included (table III.). (One of the five patients is listed on a later chart with miscellaneous complications.) Four of the five patients have had a return to apparently normal menstrual function after intervals of up to 6 months. The patient with persisting metrorrhagia is a 20-year-old individual with no history of previous menstrual irregularities. She had taken Enovid-E for 6 months. Since she omitted the medication she has had metrorrhagia for 1 to 2 weeks before her menses for 24 months. So far she has not returned for any specific diagnostic or therapeutic studies.

The *infections* of the vagina and of the vulva have been encountered fairly frequently. The most frequent infection has been a monilial vulvovaginitis. In this report 11 patients are listed (table IV.). The monilial infection has been seen so often that no attempt was made to record all of the cases. All of the infections, including the nonspecific vaginitis and the furunculosis, responded rapidly to treatment after the pills were omitted.

The most frequent *change in the pelvic organs* (table V.) has been that of a pseudodecidual reaction of the cervix. The reaction has been encountered so often that the cases listed here represent only a few of the ones which have been seen. The reaction of the cervix has been so severe in some patients that the gross appearance simulated that of a malignancy. The benign nature of the lesion can be proven by a Papanicolaou smear and cervical biopsies. It has not been possible to clear the pseudodecidual reaction by local therapy as long as the pills were continued. The cervical changes cleared, or responded readily to treatment, after the pills were omitted.

The two patients with leiomyomas had the uterus enlarge to twice its previous size during the 6 months of treatment with the pills. After the pills were discontinued the leiomyomas and the uterus decreased to approximately the size which had been present before the pills were prescribed.

It is possible that unexpected pelvic pathology may be associated with pill therapy. The endocervical polyps were removed by curettage. The pathologist at his examination suggested that the polyps may have developed as a result of the Enovid stimulation. Another unexpected finding was that of a patient with recurring attacks of cystitis. After the contraceptive pills were omitted, the bladder infection was cleared by the same medication which she had been using previously.

The *vascular accidents*, together with the emotional or psychiatric changes, have been the most serious complications in my experience (table VI.).

The patient with the three pulmonary emboli was a 37-year-old woman, 62 inches tall, weighing 121 pounds, who had been placed upon cyclic therapy with Ortho-Novum, 2 mg. daily, for dysmenorrhea with mild pelvic endometriosis. She was in good general physical condition. As she began her third cycle of Ortho-Novum in November 1965, she developed the first pulmonary embolus, apparently from her pelvic veins, with no other clinical evidence of disease. In the next 2 weeks, in spite of anticoagulant therapy, she developed two more pulmonary emboli. After her recuperation from the emboli, she has had no other abnormality develop.

The subarachnoid hemorrhage occurred in a 31-year-old patient who was apparently normal and who had been prescribed Enovid-E as contraceptive pills. After three cycles, the patient developed a subarachnoid hemorrhage. A rupture of an aneurysm of an anterior cerebral artery was suspected but could not be identified in spite of carotid artery angiography performed twice. The patient's findings slowly cleared and she now has no neurologic residual.

The two patients of special interest among the *miscellaneous complications* (table VII.) are the patient with the visual disturbance and the patient who twice attempted the criminal abortion. The patient with the visual disturbance