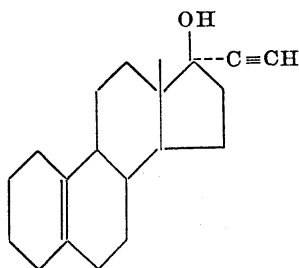


The World Health Organization lent authority to such apprehension in a report on oral contraceptives about 18 months ago. "There is at present no adequate explanation for the oral activity of these compounds or of their influence on secretion and metabolism. There have been reports of an apparent increase in pregnancy rates after cessation of combined treatment, an increase in glucose tolerance (with consequent risks of diabetes mellitus), an increase in coagulability of blood, and liver disturbance. All these phenomena need to be investigated."

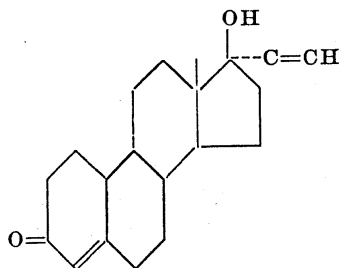
SYNTHETICS MORE ACTIVE ORALLY THAN NATURAL AGENTS

Progesterone is weak when taken orally. The ethynyl and other changes at C-17, plus removal of the angular methyl between rings A and B, impart oral activity of progestins. Chlorine or methyl at C-6 also adds to oral potency. Absence of norethynodrel's double bond lessens possible androgenic action. Natural estrogens are also weak acting when taken orally. Adding an ethynyl at C-17 eases passage of the compound from the intestines into the blood stream, the concept holds, allowing low dosages.

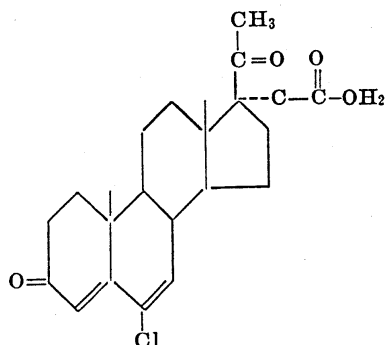
synthetic progesterones



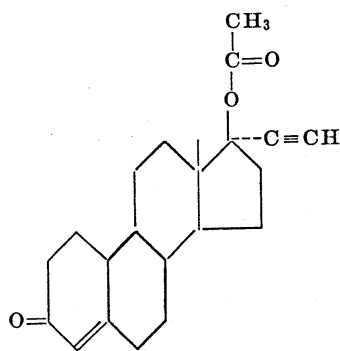
Norethynodrel



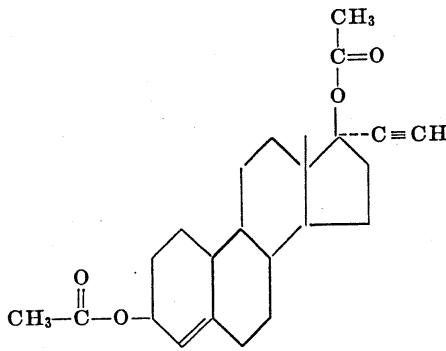
Norethindrone



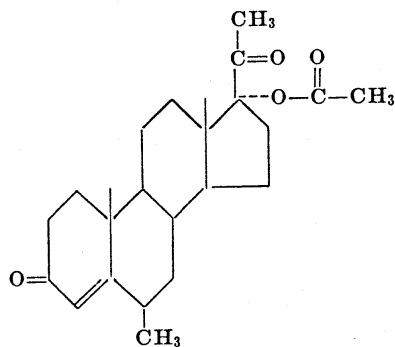
Chlormadinone acetate



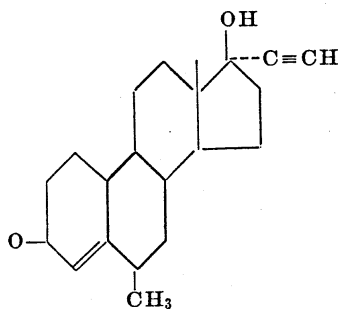
Norethindrone acetate



Ethynodiol diacetate



Medroxyprogesterone acetate



Dimethisterone