contraceptive drugs has been summarized. Since these patients represented a broad diagnostic cross section of women with either undiagnosed or established rheumatic disease, we have divided them into five subcategories. Two subgroups have been determined by evaluating the presence or absence of rheumatic symptoms before or after initiation of oral contraceptive therapy. Contemporary use of oral contraceptives at the time of retrospective evaluation has also been considered in establishing the other two subgroups. Data from retrospective studies of this type are generally less precise than data accumulated during a prospective study. Nevertheless, this table demonstrates that one should exercise caution in attempting to predict adverse effects from the use of oral contraceptive drugs in a cross section of patients with rheumatic disease who have been evaluated routinely in an arthritis clinic. It is of interest that half of the patients who had had some experience with the use of oral contraceptives had discontinued these agents on their own. Patients with early rheumatic complaints and some of the patients with systemic lupus erythematosus were more likely to note improvement after discontinuation of oral contraceptive therapy than were patients with will-established disease. In this group of patients we have not attempted to correlate the frequency of abnormal laboratory tests with the use of these drugs since stored blood specimens were not consistently available during and after therapy.

At the time of initiation of the survey of the Arthritis Clinic population at our institution in August, 1968, arrangements were also made to study a group of apparently healthy young women reporting to a local birth control clinic. During the past 18 months, a total of 450 women ranging in age from 18–29 years have been surveyed. Blood specimens have been obtained in one group of women prior to the initiation of oral contraceptive therapy and after three or more months of drug use. A larger second group of patients have been surveyed during treatment with these drugs. This second group is similar to those surveyed by other investigators. We feel that it was crucial to determine the incidence of abnormal laboratory tests for antinuclear antibodies and LE cells prior to initiation of oral contraceptive therapy since it is impossible to interpret abnormal tests if the pretreatment status of the individual is unknown. In studying this birth control population, it has been difficult to obtain a high percentage of on-treatment blood specimens. In contrast to patients with symptoms, normal individuals have less reason to return for medical follow-up when it is of limited personal benefit. To date, we have succeeded in securing pre- and post-treatment blood specimens on 60 of the total of 450 women. There has been one case in sixty in which the test for antinuclear antibodies was normal before treatment and then became positive after three months of treatment with oral contraceptive drugs. It is of interest that a 4.5% incidence of positive antinuclear antibody tests was observed prior to oral contraceptive therapy. This increased to 5.7% during therapy. This increase is not considered to be statistically significant. To date positive LE cell tests have failed to develop during the use of oral contraceptive drugs in this "normal" population. Our studies contrasting patients with rheumatic symptoms evaluated in an arthritis clinic population with women reporting to a birth control clinic confirm the observations reported by other investigators. In other words, results obtained in these two different population groups reflect an inherent difference in the individuals studied in these two settings.

We would conclude from our present studies that the decision to use oral contraceptives in patients with early or established rheumatic disease should be individualized. It is important for physicians to recognize that abnormal tests for antinuclear antibodies, LE cells, and rheumatoid factor (the latter reported by McKenna, Weimer and Shulman) can be associated with the administration of oral contraceptive drugs. Since these tests are important in the differential diagnosis of rheumatic disease, the physician should inquire regarding use of these agents before attempting to interpret the significance of these tests in individual patients. We do not feel that it is justified at this time to generalize further on our preliminary findings. Needless to say, additional studies are warranted, and we hope to continue to accumulate additional information bearing upon the effect of these agents on patients with both undiagnosed and established rheumatic disease. The long established clinical observation that natural pregnancy may ameliorate rheumatoid arthritis and may flare symptoms in patients with SLE must be considered when entertaining the use of these drugs in patients with rheumatic disease. Not all patients with systemic lupus erythe-