

for inspection, it was sometimes necessary to reject more than 100 before finding a patient who met the additional matching criteria for a control.

Three-fifths of the cases were married at the time of the episode, 85% were white, and nearly one-half were treated in New York City hospitals (Table 4). Although records were searched for cases over a three-year span, owing to the duration of the study, illnesses were spread over a five-year period, most of them occurring in the period from 1965 to 1967 inclusive. The highest case-frequency was in the age class 20-24, the next highest at 40-44. Various sources indicate that thromboembolism incidence increases sharply with age, but so also do the chronic illnesses which disqualified patients for this study. The age distribution of the series is a function of these two determinants, and doubtless others as well, such as patterns of use of oral contraceptives. It should not be taken as reflecting differential risk of thromboembolism.

Table 5 shows the distribution of some characteristics on which preliminary matching was not attempted. Differences between cases and controls with regard to the family income, the patient's religion and the patient's maximum weight fell short of conventional levels of significance. There were differences, significant at the 5% probability level, in the patient's education (although not in the husband's education, for married patients), the proportion who were working just before their hospitalization, and the proportion who were working at a medically-related job (or whose husbands had a medically-related job). There were indications that hospital employees, and particularly student nurses, had a greater chance of being hospitalized if they developed thromboembolism. Therefore the data were reanalyzed excluding those pairs in which the case was a student nurse. The difference in educational level and the difference in proportions working outside the home were found to be no longer statistically significant, but the difference in the proportion employed in a medically-related position remained.

The respondents were shown a list of 13 contraceptive methods and asked to identify those they had used within the two years prior to hospitalization, by reading back the corresponding letters (e.g., Method B. Method F). Many had used more than one method. Differences between cases and controls were generally quite small, and statistically not meaningful, except for the oral contraceptives, which had been more often used by cases. Thus the birth control practices of the two groups were similar, as indicated additionally by the fact that 114 cases and 101 controls had used one or more methods (Table 6).

The time at which the cases and controls who had used oral contraceptives within two years prior to admission terminated their use is presented in Table 7, which shows a marked disparity in use up to the time of admission, but virtually none in use that terminated more than one month prior to admission. This is taken as evidence that there is no continuation of excess risk after use of the hormones is stopped, and analysis of case-control differences will therefore be confined principally to use within one month prior to admission. It is assumed that the few cases who had terminated use during the month before admission were, at the time they stopped, already suffering from the conditions for which they were hospitalized.

The duration of use of oral contraceptives is shown in Table 8, both for the product used last before hospitalization and for all products used in the two-year period, together with the corresponding percentages based on all users. The probability of a series of differences as large or larger than that observed is greater than 0.5. Thus, there is no evidence from this material that the risk is enhanced with duration of use.

No absolute significance may be attached to the distribution of duration of use in the case series, since it is similar to the controls. It presumably results from the interaction of the increasing popularity of oral contraceptives over the interval studied, and the tendency of some patients to discontinue their use because of minor side-effects. It cannot be inferred that the period from 1 to 5 months' administration is more likely to be hazardous than any other.

Majority opinion holds that the proper analytic method for the study and testing of differences between case and control groups where pairing has been practiced is to preserve the paired relationship, although the results usually are not greatly different from those using the conventional group comparison. The derivation of the relative risk of persons possessing an attribute getting a