

angiography. Only cases in which the hospital diagnosis was unequivocal were accepted, and the records were reviewed independently by two physicians, one a board-qualified internist, who rejected those cases which they considered doubtful.

Controls were female patients discharged alive from the same hospitals in the same 6-month time interval. In addition to these matching factors, they were individually matched to the thromboembolism cases on age (within the same five-year span), marital status, residence, race, parity (three classes—0, 1–2, 3 or more prior pregnancies), and hospital pay status (ward, semi-private or private). The small inaccuracies in matching are explained by differences between statements on the hospital records and interviews, the latter being accepted, and also by occasional inability to obtain a perfect match. The same exclusions, on the basis of infertility or chronic disease, applied to the controls as to the cases. Controls for the most part were admitted for acute medical or surgical conditions, trauma including fractures and dislocations, and elective surgery such as nose and throat operations.

Two controls were picked for each case in nearly all instances, in order that the case need not be dropped from the study if the first control proved unavailable for interview.

In the course of the study, several changes were made, although the original plan was followed exactly throughout for the main study group of married women with idiopathic thromboembolism. In Philadelphia, New York City and Pittsburgh, unmarried cases and controls were included, as it had become evident that idiopathic thromboembolism was relatively frequent among younger, unmarried women and it seemed unwise to disregard this source of case material.

In Philadelphia, the interviewing of the unmarried cases and controls was undertaken by students at the Woman's Medical College of Pennsylvania, under the direction of Dr. Judith Mausner, instead of by interviewers employed by the market research firm. This was done after the regular interviewing session had ended and when it was decided to query unmarried patients.

#### RESULTS

The final study group consisted of 175 cases. These cases were selected from 2,648 women who had final diagnoses of thromboembolic illnesses at the 47 participating hospitals and whose illnesses were considered sufficiently likely to meet the study criteria as to warrant the preparation of a medical abstract. Obviously, there was a high degree of selection and the series cannot be considered as representative of all hospitalized thromboembolism, even in these hospitals. Table 1 gives the derivation of the study group.

Some exclusions were for uncertainty of diagnosis, some because of a prior attack of thrombophlebitis, but the great majority were for evidence, either in the history or physical or laboratory findings, of conditions that were regarded as possibly predisposing to thromboembolism. Three of the most common of these were obesity, varicose veins, and hypertension. Doubtless some patients with these conditions were included, and likewise some patients were probably erroneously excluded, since it was necessary in many instances to interpret conflicting or incomplete statements in the hospital record. For example, many patients were not weighed while in the hospital and the examination record was often uncertain as to the presence of obesity.

The diagnoses of the study group are presented in Table 2. Thrombophlebitis was the most frequent; diagnoses of phlebothrombosis were, for purposes of this study, included under thrombophlebitis. Pulmonary embolism was encountered with equal frequency as the only diagnosis, and in association with peripheral thrombophlebitis. Cerebral and retinal vascular lesions were infrequent. Coronary artery disease was not represented, since all cases investigated had evidence of a predisposing condition such as hypertension or diabetes, or else of infertility resulting from surgical procedures.

Table 3 indicates that most controls were found among women admitted for elective surgical procedures, with acute surgical conditions, acute infections, trauma, and acute medical conditions appearing less frequently. As in the selection of cases, potential controls with chronic medical conditions were usually rejected. After the records of patients matching a case on those demographic factors which were available in the record room index had been drawn