

A decision on whether or not a woman was lactating was made according to the situation on the seventh day after delivery, a criterion similar to the one adopted in the Cardiff survey. In assessing parity, pregnancies terminating before the twenty-eighth week were not counted. Women subjected to caesarean section or forceps or breech delivery were classified as having an assisted delivery. These standards were applied to both the affected and the control series.

Oestrogen Therapy.—At both hospitals it was the routine practice, when it was decided to inhibit lactation, to administer ethinyloestradiol by mouth, beginning as soon as possible after the woman's delivery was complete. This was given two or three times daily in gradually diminishing amounts for seven days. The dose on the first day was 0.35 mg., and this was reduced by 0.05 mg. daily. So the total dose administered to each woman was 1.4 mg., which is reckoned to be equivalent in activity to 50–70 mg. of stilboestrol (Jeffcoate *et al.*, 1948).

PRESENTATION OF RESULTS

The control cases were analysed by age, parity, mode of delivery, and lactation habit¹ to give a picture of the hospital community at the time and to show how many women fell into each of the groups. By breaking down the cases of thromboembolism into similar groups it was then possible to calculate the incidence of thromboembolism per 1,000 women in each category. The figures shown in Table I, which represent a breakdown by age alone, illustrate the method employed. If for any group there were no control patients an incidence could not be calculated, and no figure appears in the Tables. If any group contained fewer than five (equivalent to 500) control cases, the calculated incidence is regarded as unreliable, and the figure in the Table is marked with an asterisk.

TABLE I.—LIVERPOOL MATERNITY HOSPITAL (1956–66 INCLUSIVE)

Age in years	<25	25–34	35+	Total
Sample of control deliveries (1 in 100 cases).....	119 (35.7%)	179 (53.8%)	35 (10.5%)	333
Calculated total control deliveries.....	11,900	17,900	3,500	1 33,300
Cases of thromboembolism.....	14	29	29	72
Incidence of puerperal thromboembolism per 1,000 deliveries....	1.2	1.6	8.3	2.2

¹ The actual number of recorded deliveries in the hospital was 33,627.

FINDINGS AT LIVERPOOL MATERNITY HOSPITAL

The number of women delivered in this hospital during the 11-year period 1956–66 was 33,627, and 91 of these suffered deep venous thrombosis or embolism, or both. The incidence of recorded thromboembolism was therefore 2.70 per 1,000 births. The vascular accident occurred during pregnancy in 19 cases and during the puerperium in 72. The incidence of puerperal thromboembolism was therefore 2.14 per 1,000 births. Of the 72 women with puerperal thromboembolism 26 were lactating on the seventh day.

The number of control patients studied was 333, a figure which is three fewer than one-hundredth of the total recorded deliveries. This slight discrepancy is explained by the fact that, at this particular hospital, control case sheets were abstracted for each year separately. Of the control women 212 (almost 64%) attempted breast-feeding, and 121 had lactation inhibited. From this it can be calculated that 46 of the 62 women who developed thromboembolism should have been lactating, whereas, as mentioned previously, the actual number was 26. This overall picture is confirmed by the calculated incidence of thromboembolism, which is 1.2 per 1,000 among lactating women and 3.8 per 1,000 among those who had lactation inhibited. For parity groups 1, 2, and 3 the comparable rates are 1.0 and 3.4 per 1,000.

It is next necessary to examine the influence of other factors, and the breakdown of our cases by age, parity, and mode of delivery is shown in Tables II and III. Consideration of these suggests the following conclusions.

¹ The weight of the woman is another factor of some importance in the aetiology of thromboembolism, but the records were not sufficiently complete to permit a study of this.