

Age

Among lactating women (Table II) age has little effect until the borderline of 35 years is reached. After this the incidence of thromboembolism mounts steeply in all parity groups, being increased five times overall. A similar trend is shown among women who did not lactate (Table III). In Table III there are subgroupings by mode of delivery, but, disregarding this factor, the incidence among non-lactating women is 1.7 per 1,000 for those less than 25 years and 4.9 per 1,000 for those older. Again, however, 35 years is a more significant divisional point. The incidence for women aged 25 to 34 is 2.9 per 1,000, whereas for women aged 35 and more the figure rises to 11.7 per 1,000 (almost seven times greater than that for women less than 25 years of age). A similar picture is presented by studying the effect of age irrespective of parity, mode of delivery, and lactation. Thus, in Table I it will be seen that considering all cases of thromboembolism, the incidences for the three age groups are 1.2, 1.6, and 8.3 per 1,000 respectively.

Parity

The figures in Tables II and IV, and to a less extent those in Table III, suggest that, irrespective of lactation habit and mode of delivery, the incidence of thromboembolism increases with high parity. However, as was suggested previously (Jeffcoate and Tindall, 1965), the having of many babies generally means older age, and the latter factor is likely to be the more important. Leaving aside "grand" multiparity, the breakdown of our cases suggests that 1-paras are rather more likely than 2- or 3-paras to develop puerperal thromboembolism (Table IV). This may reflect a higher incidence of operative deliveries in that group (see below).

TABLE IV.—LIVERPOOL MATERNITY HOSPITAL (1956-66 INCLUSIVE)

Parity:	1	2 and 3	4 and more	Total
Sample of control deliveries (1 in 100 cases).....	144	153	836	333
	(43.2%)	(46.0%)	(10.18%)	
Calculated total control deliveries.....	14,400	15,300	3,600	33,300
Cases of thromboembolism.....	30	25	17	72
Incidence of puerperal thromboembolism per 1,000 deliveries.....	2.1	1.6	4.7	2.2
	1.9			

Mode of delivery

The analysis of our series, unlike that published by Daniel *et al.* (1967), indicates that mode of delivery is very significantly associated with puerperal deep venous thrombosis and embolism. Among lactating women the incidences for spontaneous and assisted delivery are similar, but among women who had lactation inhibited the chance of thromboembolism is increased four times by operative delivery. Moreover, comparing Tables II and III, it will be seen that for women less than 25 years of age inhibition of lactation has no effect unless the delivery is assisted, when the risk rises three times. This is different from the experience of the Cardiff workers, who concluded that inhibition of lactation in women less than 25 years of age had no effect, irrespective of mode of delivery.

Disregarding age, when women delivered normally do not breast-feed the incidence of thromboembolism is only doubled; among those who have assisted delivery inhibition of lactation is associated with a six times increased risk. For the oldest age group of women failure to lactate considerably increases the risk if they have a complicated delivery, whereas it has virtually no effect if their delivery is normal. The importance of operative intervention may be even greater than is indicated by the statistics presented here because a few of the women who suffered puerperal thromboembolism and who are classified as having a spontaneous delivery had other operations such as manual removal of the placenta under general anesthesia or tubal ligation in the puerperium. To avoid complicating the presentation these were not put in separate categories.

Another disadvantage of accepting the classification "assisted delivery" without qualification, which was done to conform with the original Cardiff study, is that it gives no idea of the severity of the operative intervention. Thus an