



Session IV

Outcome of Twin Pregnancy

Discussion following papers presented by Dr. Persson, Dr. Keith, Dr. Corney, Dr. Howat*, and Dr. Héluin

Dr. Cetrulo stated that twins, controlled for gestational age, were heavier when mothers had bed rest than when they remained ambulatory and asked how Dr. Corney had controlled for bed rest.

Dr. Corney replied that no account had been taken of bed rest in either the Oxford or Aberdeen analysis. The important fact was that the results were the same in two different centres irrespective of policies and practices on bed rest.

Professor MacGillivray stated that there was no routine policy on bed rest in Aberdeen.

Dr. Corney in reply to several questions on the significance of placentation and length of gestation stressed that DZ were heavier than MZ twins in pairs or individually, and this applied when both placentation and length of gestation were taken into account. The mean length of gestation was the same for DZ and MZ pairs not only for survivors, as he had shown, but also in the total twin population in his survey.

Dr. Schneider commented that Dr. Corney's findings on birth weight agreed with Professor Leroy's.

Dr. Keith asked whether Dr. Héluin wanted to make any practical recommendations whether twin pregnancies should be continued as long as possible in the interests of improved survival.

Dr. Heluin replied that in his centre routine induction was preferred at 37–38 weeks. Premature delivery, before 35 weeks, occurred in 12% of cases.

Professor MacGillivray asked what justification there was for induction if the pregnancy was uncomplicated and progressing normally.

Dr. Heluin considered that the potential hazard of maternal complications of PET and of maternal/fetal morbidity and mortality were good grounds for intervention at 37–38 weeks.

Professor Nylander said that in Nigeria, which has the highest twinning rate in the world, pregnancies went to term unless there were good clinical reasons for induction. He questioned the assumption that twins were big enough at 37 weeks and asked what account was taken of the differential weight of twins – the first twin might be big enough for survival, but the second might be much smaller and die.

Professor MacGillivray wondered whether Dr. Heluin was suggesting that postmaturity occurred 2–3 weeks earlier in twin pregnancies and that 37–38 weeks in twins could be considered equivalent to 40–41 weeks in singletons.

Dr. Keith considered that the concept of routine induction might become more attractive as regionalised obstetric and perinatal services developed; controlled induction might be preferred and safer if performed at specific times when adequate numbers of staff were advised.

*The paper by R. Howat, "Perinatal mortality in twins: Review for Scotland 1977", is not published in this issue.

Dr. Zahálková reported that studies carried out in Czechoslovakia showed no difference in birth weight of MZ/DZ twins; there were no data on placentation. She queried the role of poor patient nutrition in the low birth weight of MZ monochorionic (MC) twins and asked if any follow-up studies of the growth of twins of known zygosity and placentation had been carried out.

Dr. Corney said he knew of none.

Professor Leroy wondered to what extent parity might explain differences in birth weight and primigravidae were more likely to have MZ twins who had a higher maturity. Also, survivors were likely to be heavier than those who died.

Dr. Corney replied that additional preliminary studies indicate no further effect of parity. Although he had presented data for survivors only, those for the total cases showed similar results and would be published.

Professor Nylander suggested that embarrassment of the circulation due to the vascular arrangement in the uterus partly accounted for the lower birth weight of the MC group.

Dr. Corney noted that the most valuable group for present purposes was the smallest – ie, MZ MC twins.

Professor Nylander reverted to the question of induction and birth weight and what account was taken of the fact that twins, because of early induction, might not get the chance of attaining the same weight as singletons.

Professor MacGillivray said that in Aberdeen 40 weeks was accepted as the maximum length of gestation for twins.

Dr. Persson, using a slide showing perinatal mortality and gestational age in Sweden, noted that the lowest rate in twins was two weeks earlier than in singletons.

Professor Leroy said this confirmed the finding of other studies.

Dr. Hall pointed out, however, that these results reflected the fact that mothers of twins were more likely to have complications. They did not answer the question, which was whether and when the obstetrician should interfere in uncomplicated twin pregnancies. She wanted proof that early induction in such cases was beneficial.

Dr. Schneider commented that if induction failed, then a Caesarean section would be necessary. He wondered whether obstetricians were ready to systematically carry out Caesarean section at 37 weeks in over half the cases.

Dr. Lazar suggested that controlled trials on induction would be an appropriate area for international collaboration. If each centre continued its own practice/procedure, there should be no ethical problems.

Dr. Cetrulo reckoned that about 40% of singleton births were induced without medical reasons and questioned the concern about routine induction of twins.

Professor MacGillivray said that, although the induction rate in Aberdeen was high, there was always a medical reason; in some cases this was postmaturity (41–42 weeks) in singletons. The real question was, what should be considered postmaturity? In Aberdeen this would be 7–10 days over 40 weeks.

Dr. Cetrulo thought there was confusion in terminology, and he would make a distinction between “elective” induction and that done for medical reasons. He did not object to induction per se, but at the suggested routine induction at 37–38 weeks in twin pregnancies.

Professor Whitfield shared this view because of the difficulties of assessing gestational age with absolute certainty. He thought that the possibility of overestimating gestation increased the risk if interference occurred at estimated 37 rather than 40 weeks.

Dr. Cetrulo reverted to the controversial subject of bed rest and suggested that attempts should be made to assess its value.

Dr. Derom agreed that it was an important matter which should be investigated, but this raised many methodological problems.

Professor MacGillivray pointed out that straight comparisons between centres of Aberdeen and Malmö were inappropriate.

Dr. Cetrulo thought it might be possible to conduct a completely randomised trial in different centres, allocating bed rest/none by last digit in hospital numbers, and in this way epidemiological differences with such large numbers would cancel out.

Professor MacGillivray and Dr. Hall were doubtful whether such a study could be instituted in any centre.

Dr. Keith agreed that such an experiment with patients was not acceptable, and he thought obstetricians should benefit from collective experience already available in the literature. Immaturity and respiratory distress killed these small babies. He wanted to know how much more academic biostatistical epidemiological information was needed to convince obstetricians of the benefit or otherwise of bed rest in a variety of parameters. The study suggested was of theoretical interest only.

Dr. Hall did not accept that bed rest was always beneficial. It could lead to muscular atrophy, and there were other considerations for multiparae who had children at home. Practice also depended on facilities available and the need to make the best use of beds.

Dr. Cetrulo considered that bed rest any time after 20 weeks must be beneficial and questioned the suggestion by others that 29–35 weeks was critical.

Professor MacGillivray pointed out that improvement in late abortion was not under discussion.

Dr. Persson felt that bed rest would reduce morbidity by increasing uterine blood flow at a critical time of 29–34 weeks. In reply to a question from *Dr. Derom* about bed rest and PET he then said that PET had virtually disappeared in Malmö. About 10% of women expecting twins had oedema, but there were no cases of severe PET. Swedish families only had two children, so that his data referred to first and second pregnancies only.

Professor Leroy wondered whether different types of deformities would explain the variation in perinatal mortality between East and West Scotland and to what extent singletons and twins were discrepant.

Dr. Howat in reply, stated that CNS malformations were higher in the West and that the difference was more marked in twins. However, in the series studied, both twins were affected in one case only – that of conjoined twins.

Professor Leroy thought that the Irish influence in the West might be important, as the rate of CNS malformations is high in Ireland.

Dr. Schneider and Professor Whitfield pointed to high rates of CNS malformations in South Wales and Brittany.

Dr. Howat thought the Celtic influence might be the factor in all the examples cited.

Dr. Persson reported that the rate for Malmö was the same as for Sweden.