

Scientific and Clinical Advances Group

Twins and Assisted reproduction

Committee:	Scientific and Clinical Advances Group
Meeting Date:	15 th December 2004
Agenda Item:	7
Paper Number:	SCAG (12/04)03
Paper Title:	Twins and assisted reproduction
Author:	Katy Berry
For Information or Decision?	Information and comment
Recommendation to the Committee:	Members are asked to note the research presented and comment on the publications in the context of a potential review of the embryo transfer policy.

Background

1. As fertility treatment has become more effective and widely available, there has been a steady increase in the number of multiple births. It is generally viewed that multiple births, and specifically those resulting from assisted reproduction, are to be avoided. This is because of the well documented risks to the children, such as pre-term birth and low birth weight and the associated increased possibility of physical disability and learning difficulties. It is also thought that the rate of cerebral palsy is increased in multiple births as compared to singleton births.

2. The increase in multiple births is due in part to the transfer of multiple embryos back into the woman to increase the chance of pregnancy. One possibility for the policy business plan for 2005/2006 is a review of the embryo transfer policy. If the review goes ahead, the papers described below may need to be considered in this context.

Twins born after assisted reproduction- literature

3. Two papers were published earlier this year that challenge the accepted notion of risks associated with multiple births following assisted reproduction. 4. The first paper published in January 2004 by Helmerhost *et al* (Annex A), compares the perinatal outcome of singletons and twins after assisted

reproduction. They concluded that singleton pregnancies resulting from IVF have a worse perinatal outcome than naturally conceived singletons but this is less significant for IVF twins. In fact in twins, the perinatal mortality is about 40% lower with assisted reproduction twins than with naturally conceived twins. The second paper published in July by Pinborg *et al* (Annex B) reports a controlled national cohort study of neurological sequelae in twins after assisted reproduction. This paper concluded that there is a similar risk of neurological sequelae for twins from assisted conception as there are from naturally conceived twins and assisted reproduction singletons.

Conclusion

4. Members are asked to:
 - Note the literature presented in this paper
 - Comment on the research and conclusions of the publications
 - Consider the results in the context of a possible review of the embryo transfer policy.