Twin Research and Human Genetics
Volume 19 ▌ Number 3 ▌ p. 167 ▌ © The Author(s) 2016 ▌ doi:10.1017/thg.2016.30

EDITORIAL

Editorial–Special Issue

Monochorionic twin pregnancies are subject to unique complications that can threaten the life and well-being of both fetuses, resulting in a disproportionate increase in perinatal morbidity and mortality.

Twin-twin transfusion syndrome (TTTS) affects 10–15% of monochorionic pregnancies. In the absence of intervention, perinatal loss or long-term neurodevelopmental impairment can be expected in over 90% of cases. Establishing chorionicity in the first trimester, followed by serial ultrasound monitoring and intervention with timely fetoscopic laser coagulation of placental anastomoses results in overall survival rates of approximately 80% of fetuses, with a significant reduction in adverse neurodevelopmental outcome.

Laser coagulation of placental anastomoses has been firmly established as the best available treatment for severe TTTS. Since its introduction, there has been a substantial increase in the number of centers offering this procedure throughout the world, with increasing experience in laser therapy resulting in better outcomes both in terms of survival and long-term deficits.

Despite the significant progress in the area in the last decade, several questions remain, including aspects of terminology, natural history of the disease, classification and staging, variation of treatment options, post-intervention complications and, particularly, outcomes for survivors.

This special issue of *Twin Research and Human Genetics* has brought together the world leaders in the diagnosis and treatment of this debilitating condition. The invited experts have contributed review articles summarizing the state-of-the-art diagnosis and management of TTTS, alongside original contributions that add evidence and shed light on some of the above-mentioned questions.

As editors, we acknowledge the sometimes contrasting views at times expressed by different groups on the same topic throughout the special edition. We believe these apparent discrepancies highlight topics where consensus has yet to be achieved. This journal provides an avenue for rich academic debate and we invite our readers to draw their own conclusions.

Compiling this special edition has been an extraordinary opportunity made possible by Professor Nick Martin, Editor of *Twin Research and Human Genetics,* and supported by the publisher, Cambridge University Press. We would like to thank Roberta Blake for her assistance along the different stages of the production of this issue.

We hope that you will enjoy the content of this journal as much as we have enjoyed preparing it.

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