

FROM THE EDITOR'S DESK

It is with a strong sense of pride that I announce the launch of a new journal *International Journal of Infertility and Fetal Medicine* under the aegis of International Institute for Training and Research in Reproductive Health (IIRRH). Until a decade ago the world of the fetus was considered remote and impenetrable. With the advent of certain technical developments, it is now possible to peer into the realm of the fetus and study its development. With the advent of procedures such as fetal ultrasonography, fetal Doppler, biochemical testing, DNA analysis, prenatal diagnosis and molecular cytogenetics, the obstetrician has increasingly powerful tools to help in the management of high-risk pregnancies. Similarly assisted reproduction is one of the fastest growing areas of medicine having expanded far beyond the expectations of the pioneers in this field. The International Journal of Infertility and Fetal Medicine will bring to you original research and review articles, case reports and debates pertaining to these subjects thus helping you keep pace with latest developments in these fields.



This first issue covers a myriad variety of articles starting with a review article on “Preimplantation Genetic Diagnosis in Current Infertility Practice” by Prof. Helen Ghislaine Tempest, Prof. Joe Leigh Simpson. Chromosome imbalances are the leading causes of pregnancy loss in humans and play a major role in female and male subfertility. In the past two decades the development and application of PGD has played an important role in infertility practice worldwide. The purpose of the review is to discuss how PGD may be applied in combating numerical chromosomal abnormalities and translocations. The rationale to utilize PGD to transfer only euploid would seem sound but controversies exist surrounding the application of PGD for aneuploidy detections. The review also discusses the trend towards differing sources of embryonic DNA (polar body versus blastomere versus blastocyst) as well as development of novel technologies for 24 chromosomes analysis.

The gonads play a critical role for a successful fertility outcome. Synchronized activity of various cells in the gonads is required to provide a favorable niche for the growth and development of germ cells. The important role of connexins has been speculated in the maintenance of homeostasis, morphogenesis, cell differentiation and growth control in higher organics. Expression of gap junction proteins in the reproductive tissues has drawn the attention and interest of researchers to investigate their role in reproductive outcome. Dr. Piyush Tripathi's extensive article on the same, attempts to throw light on this complex subject.

Multiple pregnancy and preterm deliveries are well known complications of ART procedures. Therefore, there is an increased impetus to opt for single embryo transfer especially in younger women. A questionnaire based study on knowledge and attitudes of women undergoing IVF regarding multiple pregnancy, multiple embryo transfers and fetal reduction was done by Dr. Sathya Balasubramaniam. Indian women were similar to their western counterparts in preferring multiples pregnancies to maximize their chances of getting a positive pregnancy result. The negative impact of twins is generally disregarded by women prior to getting pregnant.

Assessment of endometrial receptivity still remains an enigma. Dr. Sonal Panchal from Nagori's Institute for Infertility and IVF, Ahmedabad has done extensive work on the role of 3D and 3D power Doppler to assess endometrial receptivity in IUI cycles and concluded it to be beneficial in improving the implantation rates.

In recent years as the problem of infertility is increasing an increased risk of both obstetric and perinatal complications has been perceived. A study on this was done by Dr. Chitra Thyagarajan and Dr. Papa Dasari from JIPMER, Pondicherry comparing outcomes in spontaneous conceptions with that of conceptions following treatment for infertility and the results have been published here.

We end this issue with two interesting case reports, one on Heterotopic pregnancy in natural conception by Sumeet N Baheti, et al and another of a woman with Down syndrome delivered a normal child by Manila Kaushal, et al. There are very few reports all over the world of reproduction in women with Down syndrome and this is only the second reported case in India and hence makes interesting reading.

Finally, I would like to thank my associate editor Dr Mala Arora along with the national and international advisory boards for their support in reviewing articles promptly and reverting back at the earliest. My special thanks to my resident editor Dr. Deepika Krishna, for her untiring efforts and coordination at all stages of bringing out this journal. Her attention to detail and outstanding communication skills facilitated the submission of articles, their review and proof reading, and finally the launch of this journal. I will continue to be in contact with all of you through editorials as and when required and hope that you, the reading public, will welcome the journal and ensure it grows to become one of the leading journals in the field of assisted reproduction and fetal medicine.

Kamini A Rao
Editor-in-Chief