

Editorial: Ultrasound in Obstetrics and Gynecology

KH Tan
Deputy Editor, SJOG

The First International Scientific Meeting of the International Society of Ultrasound in Obstetrics and Gynecology (ISUOG) organized jointly by the Obstetrical & Gynaecological Society of Singapore (OGSS) and the Chapter of Obstetricians and Gynaecologists, Academy of Medicine, Singapore, and ISUOG was held in Singapore from 21 to 24 March 2004. World experts and ultrasound practitioners of our region converged in Singapore to share with each other the latest on the practice and research of ultrasound in obstetrics and gynaecology. This international meeting represented a significant milestone for the practice of ultrasound in Obstetrics and Gynecology in South East Asia. Scientific abstracts of this meeting were published in the supplement issue of the Singapore Journal of Obstetrics and Gynaecology.¹

Ultrasound has revolutionised obstetrics & gynaecology (O&G) practice. Indeed it has become a household word. Every mother now knows it and many have ultrasound pictures to show. Its success since its beginnings is truly astonishing. The interesting history of the development of O&G ultrasound in the world and in Singapore has been documented.^{2&3}

Ultrasound (pioneered by Ian Donald in 1958 in Scotland) is one of the two major technological advances in O&G which made great impact on O&G practice, the other being laparoscopy (popularized by Patrick Steptoe in 1967 in English speaking O&G community). Both only became routine and prevalent in the 1990s, changing the concepts and improving the standards of O&G care and management in many ways. Ultrasound, being safe, painless and generally reliable is now a well established screening and diagnostic tool in O&G worldwide. It is an integral tool of the O&G practitioner for the optimal management of an obstetric or gynaecological patient. It plays an important role in the management and reduction of birth anomalies and allows patient more informed choices before the birth of the baby. Dating scans and fetal anomaly screening scans are now part of routine antenatal care in the developed world. Ultrasound guided procedures like amniocentesis and oocyte retrieval are common. Assessment of gynaecological masses like fibroids and ovarian cysts by ultrasound and its uses in subfertility are also widespread. It has brought many benefits e.g. the prevalent use of ultrasound in the practice of O&G in Singapore has reduced the incidence of ruptured ectopic pregnancy with gross hemoperitoneum and shock.⁴ All O&G clinics in Singapore now have easy access to ultrasound scan facility and many even have the ultrasound machine within the consultation room itself.

The ultrasound revolution of O&G practice poses new challenges for O&G practice and practitioners. A whole generation has to relearn the basics of O&G care brought about by paradigm change in care from this ubiquitous tool. In obstetrics, management issues like ultrasound markers with increased chromosomal risks and Doppler examination of the fetus are increasingly common. Ultrasound technology, the pinnacle as exemplified by 4D ultrasound, is progressing rapidly. New standards of care are set e.g. routine screening scan with its detail imaging of fetal parts are considered part of optimal antenatal care. Regular continuing medical education (CME) and scientific meetings like this international meeting are thus essential for keeping our doctors relevant with rapidly changing contemporary ultrasound practice and to keep abreast with changing best practice. This will ensure that standards of practice relating to ultrasound will be kept high but not disparate.

While earlier diagnosis of anomalies and detection of chromosomal markers by ultrasound in-utero allows wider management options in antenatal ultrasound screening, it is generally accompanied by a certain degree of patient anxiety and distress. It behooves us as practitioners to provide optimal counseling pre and post ultrasound screening.

The limitations of ultrasound examination, which include false positives, false negatives and possible diagnostic and prognostic uncertainties post-imaging, must be understood by patients and practitioners alike. Ensuring realistic patient and public expectation of the ultrasound capability in patient care is the key to optimal care. Hyped-up premature public advertisement offering the latest ultrasound capabilities and related service without ensuring that the general O&G community is ready to cope with the new demand & its limitations and without regards to costs & its feasibility as a routine standard may unwittingly generate sky-high public expectation, encourage over-servicing & over consumption of health resources and increase health care costs. Unrealistic expectations outpacing performance may lead to increased risks of medico-legal suits. It is thus important that local guidelines on the practice standards of ultrasound in O&G be formulated based on evidence & consensus and updated & disseminated regularly.

The comprehensive scientific programme of this First International Scientific Meeting of ISUOG in Singapore was specially designed with regional and international inputs to allow experts and practitioners to share their knowledge, expertise and clinical experience as well

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as to showcase important work done in regional centres. While zooming in on the latest technology, participants also focused in depth on the feasibility and the challenges of ultrasound in routine practice to allow maximum gain for participants and their patients.

Without doubt the meeting had boosted education of O&G ultrasound in our region (comprising countries which are at different stages of development relating to ultrasound) in the long run and contributed to the further development of O&G ultrasound practice in the world.

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