

# **EDITORIAL: TOWARDS BETTER PERINATAL HEALTH**

In the last two decades, significant advances have been made in the field of obstetrics, the majority of which have been in the quest for better perinatal health. Truly, this should be the aim, as perinatal health is a measure and reflection of standards of obstetric care and practice. Perinatal mortality has continued to drop especially in many developed countries, and shall continue to do so as long as the rage in obstetrics towards improved perinatal condition continues.

## **CONCEPT OF PRE-PREGNANCY COUNSELLING**

Pre-pregnancy counselling has recently emerged as one of the important obstetric contributions towards this aim. More meaningful genetic counselling is now made possible with greater knowledge of the pathogenesis of congenital fetal abnormalities; thus, attempts at preventing such births from issuing can be more effective, either by avoiding such pregnancies or preventing such unnecessary marriages. Advice can also be sought and/or given regarding medical disorders that could cause problems in pregnancy; such problems can be sorted out before pregnancy and appropriate advice given to the intending couple. Advice on diet, smoking, alcoholism are also relevant and important. These are but some of the ways pre-pregnancy counselling has made an impact on obstetric practice and perinatal health.

## **EARLY PREGNANCY**

With the progress made in the field of prenatal diagnosis, the fetus has now become accessible for study in its early stages. Procedures like

amniocentesis and ultrasound scanning, in addition to similar advances in cell karyotyping and banding techniques, estimation of alpha-fetoprotein in liquor amnii and maternal serum, and substrate analysis in cell cultures, have contributed significantly. Lately, fetoscopy and fetal blood sampling in-utero has opened up a new dimension into the study of intra-uterine hematological problems. Presently, three main disorders can be effectively evaluated in the fetus, namely chromosomal and genetic disorders, neural tube defects and blood disorders. Disorders, like the storage diseases, can now also be evaluated. The affected fetuses can then be terminated, allowing only the healthier ones to continue through pregnancy.

The application of ultrasonography into obstetric practice has added significantly to better intrauterine evaluation of the fetus. Roles include accurate dating of pregnancy, assessment of fetal growth and the diagnosis and evaluation of intrauterine growth retardation, besides its already mentioned role in prenatal diagnosis.

## **LATE PREGNANCY**

One of the advances towards better perinatal health is the development of the concept of antepartum fetal monitoring. More money and effort are spent on this aspect of obstetric care than on any other. No doubt, this has significantly reduced fetal demise and to a considerable extent, fetal morbidity. A whole host of procedures are available presently to the obstetrician in this direction, namely, radiology, ultrasonography, amniotic fluid studies, hormonal and enzymatic evaluations and

cardiotocographic electronic monitoring.

A success story is the Rhesus story where Rhesus isoimmunised pregnancies can now be thoroughly and effectively evaluated prior to decision for either intrauterine fetal transfusion or termination of pregnancy. The discovery of the effectiveness of Rh<sub>0</sub>GAM (anti-D gammaglobulin) has contributed significantly to the reduction in risk of isoimmunisation in subsequent pregnancies.

An offshoot of the assessment exercise has been the more accurate assessment of fetal maturity, especially that of fetal lung maturity by lung profile studies of phospholipid patterns in the liquor amnii. This has helped to reduce the number of deliveries of babies prone to respiratory distress syndrome and its concomitant complications.

Newer techniques are being investigated in an attempt to reduce the risk in intrauterine growth-retarded fetuses. Though not accepted by general consensus, regimes such as the use of vasodilators, Beta-mimetics and "hyperglycemic infusions" have been shown to produce favourable responses in such pregnancies.

Low-birth weight babies, especially preterm births, contribute significantly to perinatal mortality and are a major concern in most centres. The development of a programme of active management (suppression) of preterm labour by either Beta-mimetic agents or prostaglandin synthetase inhibitors with simultaneous maternal steroid therapy to mature the fetal lungs, has reduced considerably the fetal risks in such labours. Preterm labour can now be effectively delayed and labour postponed. Also, acceleration of fetal lung maturation is now feasible with the steroid treatment.

Probably the greatest achievement in obstetrics has been the introduction of safe methods of induction of labour. Over the last two decades, methods have become safer, better and more effective. Without induction, the majority of compromised pregnancies would have ended up

with significant fetal morbidity and mortality.

Coupled with induction is the use of similar agents like prostaglandins and oxytocin, in the acceleration of labour, which has helped significantly in the salvage of fetuses during times of prolonged labour.

## LABOUR

Obstetric progress made during labour in the continuing effort towards better perinatal health, includes the use of partograms in labour and their respective action lines for intervention obstetrics, better techniques of obstetric analgesia/anaesthesia, particularly epidural services, intrapartum fetal monitoring and the more liberal use of Caesarean section, what with better and safer techniques having been developed, coupled with better anaesthetic services and blood bank services.

Particularly in intrapartum monitoring, newer techniques have been evolved, especially those related to continuous fetal heart monitoring, capillary pH studies and fetal ECG evaluation. In some centres, the age of central fetal monitoring with computer back-up facilities, has arrived.

## HIGH RISK MONITORING AND SCORING

Most countries have initiated maternal care monitoring and risk scoring systems in line with the modern concept of high risk pregnancy monitoring. If carried out in an effective manner, such high risk clinics promise to have significant impacts in improving perinatal health.

There is no doubt that obstetrics will continue to progress in this direction towards better perinatal health. The future can only bring better prospects and hope for the fetus. With more trained and interested personnel, Malaysia can hope one day to reach the standards achieved in advanced centres.

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