forms (NFFVW) detected by Doppler flow plus spectral image analysis synchronous to thoracic movements (TM) as evaluated by M-mode. An US guided amniocentesis was performed and FLM testing evaluated by L/S ratio, phosphatidylglycerol presence and lamellar bodies count. Diagnostic accuracy for US-FLM, with RDS as endpoint parameter, was as follows: sensitivity: 100%, specificity: 80%, PPV: 73% and NPV: 100%.
FBMs are known to reflect pulmonary development and maturation and thus are feasibly correlated with the risk of RDS. The synchronous presence of NFFVW and TM correlate accurately with conventional FLM tests.
We suggest that this non-invasive assessment of FLM may be the choice when certain situation arise, such as: amniocentesis refusal, religious concerns, critical anhydramnios, laboratory logistic difficulties or heavy stained amniotic fluid sample.

L71

ANOMALIES IN TWINS

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There is an increased prevalence of congenital anomalies in twins (6-10%). This increase in malformations is due to both constraint deformities and malformations associated with monozygotic (MZ) twins. Classification of anomalies in twins should be as follows:
1. Anomalies unique to multiple conception (Conjoined twins, Acardiac twins, Fetus in-fetu).
2. Anomalies not unique to multiple conception, but that occur more often in twins (Hydrocephalus, CHD – congenital heart defects).
3. Anomalies not unique to twins, but more frequent because of mechanical or vascular factors associated with twinning (Clubfoot, CDH – congenital dislocation of hip).
The rate of concordance for congenital malformations in twins varies from 3/6-18.8%, and this rate is influenced by zygosity and type of anomaly.
Obstetrical problems associated with anomalies in twins include: a. Ultrasound demonstration of a twin pregnancy with discordant anomalies; b. amniocentesis with discordancy for abnormal karyotype. Selective fetocide is the solution for discordant anomalies, however, there risks to the procedure including abortion/death of the second twin and permanent damage to brain and renal tissue of the remaining fetus.
Prenatal diagnosis using ultrasonography for the various types of anomalies in twins, will be presented.

L72

IATROGENIC MULTIPLE PREGNANCY: LESSONS FROM THE DEVELOPED COUNTRIES

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Assisted reproduction technologies (ART) expose multiple ova to sperm, either in-vivo (by ovulation induction - OI) or in-vitro (IVF). Iatrogenic – physician-made – multiple pregnancies (IMPs) are a consequence of an attempt to increase pregnancy rates of costly therapies. A distinction is made between unavoidable (most of OI cases) and avoidable (IVF) IMPs. Over the last decade, epidemic dimensions of IMPs have been observed: twins increased 60-80% and higher-order multiples increased 400-600% in most developed countries. The common etiology for this increase in developed countries is advanced maternal age at conception, characterized by reduced fecundity and increased need for ART. ART is a particularly efficient treatment of mechanical infertility – the most common cause of infertility in developing countries.
Irrespective of debates such as therapy vs. prevention and governmental vs. private subsidizing, data show that most developing countries have ART centers. It is therefore important to learn a lesson from the developed countries about the consequences of this mode of conception.

The most serious complication of IMPs is preterm birth of very and extremely low birth weight infants. The expecting mothers of twins and triplets have a 10% chance of delivering at least one infant who weighs <1500 and <1000 g, respectively. Preterm delivery and very and extremely low birth weight correlate with neonatal mortality and with short- and long-term morbidity. For example, it is currently estimated that IMPs alone increase the cerebral palsy rate by 8%. In addition, although most IMPs are polyzygotic, it has been established that ART is associated with a 3- to10-fold increased incidence of zygotic splitting. The consequences of monozygosity are higher frequencies of malformations, twin-twin transfusion, and complications of monoamnionicity. The expecting mother is at 4 to 6 times increased risk to develop serious hypertensive disorders, to experience preterm contractions, to be anemic, to sustain hemorrhage, and to undergo operative interventions.
Because there are no practical methods to significantly reduce these complications, the only potential solution is to control the frequency of IMPs by either avoiding OI or by transferring only a single high-quality embryo in each IVF cycle.

L73

MANAGEMENT OF MULTIPLE PREGNANCY: APPLICATION TO DEVELOPING COUNTRIES
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Multiple pregnancies (MP) are at high risk for adverse perinatal outcome. The following objectives seem to be important in the management of MP and are applicable for developing countries. Keeping in mind these objectives may reduce perinatal and maternal morbidity and mortality.

1. Early diagnosis of MP is essential for a successful follow up. This can be done by clinical and sonographic means.
2. Physicians who are specialized in obstetric care should do pregnancy follow up.
3. Diagnosis of chorionicity by simple sonographic means is of central importance.
4. Care for the mother having a MP should include liberal work leaves and reduced physical activity.
5. Complications occurring more frequently in MP (PET, anemia, PTD, etc.) should be looked for.
6. Frequent assessment of cervical status towards the end of the second trimester may help recognizing impending preterm birth.
7. Transport of high-risk patients to secondary or tertiary centers should be available.
8. Delivery of multiples should be carried out in a tertiary center or where cesarean delivery and blood transfusion are at hand.

L74

CONTRIBUTION OF MULTIPLE PREGNANCIES TO PERINATAL MORTALITY AND MORBIDITY
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The twinning rate has increased from 10 per 1000 pregnancies in the 1970s to 13 per 1000 pregnancies, as a result of infertility treatment. But for every twin pair born, at least 10 singletons are conceived as one of a twin pair (the vanishing twin syndrome). The dizygotic to monozygotic ratio is up to 2.0 in some countries. Monozygotic twinning rate is constant worldwide at 3-5 per 1000 pregnancies. Dyzygotic twinning is highest in Africa and lowest in the Far East, with Caucasians and Indians in between (increasing with maternal age and parity). Australian data showed that multiple births account for 10% of perinatal deaths (7% of fetal deaths and 13% of neonatal deaths). Perinatal mortality rate in twins is 4.1 times higher than singletons (stillbirth rate 3.1 times higher and neonatal mortality rate 5.6 times higher). Data from the United Kingdom showed that the infant mortality rate in twins is 6.2 times higher than singletons. Furthermore, the cerebral palsy rate among survivors is 5.5 times higher in twins compared to singletons (difference greatest among term infants). The risk for both mortality and morbidity is increased in monozygotic twins due to (1) the cell division process leading to chromosomal or other ano-