

## MULTIPLE GESTATION

### A. General

Pregnant women with multiple gestations are at increased risk for complications. These include hypertension, abruption, anemia, gestational diabetes, preterm labor and urinary tract infections. Maternal morbidity appears to increase with the number of fetuses present. Prematurity and growth restriction pose the greatest risk to neonates. There is also an increased risk of fetal malformations.

Patients should have frequent clinic visits. They should be advised of the desirability of bed rest if possible. Consideration should be given to inpatient management of higher order gestations. Close monitoring for evidence of PTL (cervical exam, cervical length, fetal fibronectin) should be undertaken. Prophylactic cerclage placement or tocolytic therapy is not advocated.

### B. Specific

1. CRL for dating  $\leq$  12 weeks
2. Determination of chorionicity via ultrasound in late first/early second trimester [It is assumed that if only two layers are present in the dividing membrane, the placentation is monochorionic; if three or four layers are visualized, this suggests dichorionicity. Visualization of a triangular projection of placenta between the layers of the dividing membrane (twin-peak sign) is also useful in the diagnosis of dichorionicity, but in its absence is not as reliable in predicting monochorionicity.]
3. Multiple marker screen adjusting for twins
4. Level II ultrasound at 20-22 to evaluate anatomy
5. Whenever invasive prenatal diagnosis is indicated, an attempt should be made to sample each gestation.
6. Close monitoring of fetal growth every 4-6 weeks
7. Discordant growth  $\geq$ 25% requires close fetal surveillance, modality and frequency to be determined by MFM faculty depending on clinical situation.

### C. Higher-order gestations

All patients with multiple gestations beyond twins should be offered fetal reduction if presenting at an early gestational age. Adequate counseling should be done. Fetuses that reach viability have a significant risk of delivery before 28 weeks. Expectantly managed triplet pregnancies have a 20% risk of total loss prior to 24 weeks and an 8% risk of delivery between 24-28 weeks. Expectantly managed quadruplets have a 12% risk of delivery from 24-28 weeks. The risk of losing the entire pregnancy prior

to 20 weeks in quadruplet or higher gestations is unknown. In addition, the risks to maternal health are significantly increased with higher-order multiple gestations.

Transabdominal multifetal pregnancy reduction (MFPR) is generally performed between 10 and 13 weeks. If a fetus is noted to be abnormal, that particular fetus is targeted, otherwise, the fetus or fetuses with easiest access are targeted. A maximum of two fetuses are reduced per session. The overall pregnancy loss rate before 24 weeks for MFPR procedures is thought to be 8%. The loss rate prior to 24 weeks is directly related to both the starting and the finishing number of fetuses, ranging from 23% for sextuplets to 9% for two fetuses present at the start of the procedure. The risk of very premature delivery at 25-28 weeks decreases from 12 to 5%, 5%, 3%, and 4% with six, five, four, three, and two fetuses present, respectively, at the start of the procedure. The optimal finishing number of fetuses appears to be twins.

For fetuses that reach viability following MFPR, 85-90% can be expected to be born at 32 weeks or later, with only 3-5% born between 25-28 weeks.

#### D. Management of Labor

1. PPRM/PTL should be managed based on protocols 3 and 6.
2. If delivery of the first fetus occurs at a gestation < 29 weeks, the patient should be adequately counseled and may be offered a delayed-interval delivery. The patient should be aware of the risk of PPRM, PTL, fetal demise, intrauterine infection, and maternal sepsis. Ideal candidates are those in whom delivery of the first fetus occurs at < 24 weeks and in whom no previous cerclage has been placed in the current pregnancy. An amniocentesis of the remaining amniotic sacs is encouraged to rule out infection. The mean latency interval achieved is 36 days.

#### E. Delivery

1. The standard for higher-order gestations is to perform an abdominal delivery.
2. In the case of twins, if twin A is presenting non-vertex, delivery should be by cesarean section. This is due to the concern of the possibility of interlocking heads.
3. If twins are presenting vertex/vertex, vaginal delivery should be attempted and C/S should be performed for obstetric indications.
4. If the first twin is vertex and the second non-vertex, the expertise of the provider should be taken into account. If the EFW $\geq$ 1500g, vaginal delivery may be considered. A total breech extraction or external version of twin B is then performed.

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Amnionicity and Chorionicity in Twin Pregnancies: Prediction using ultrasound  
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CONSULTATION: Twenty-four hour consultation is available by calling the Maternal Fetal Medicine service at the University of New Mexico Hospital, 1-888-866-7257.