DELIVERY OF TWIN GESTATIONS
TWINS ARE NOW 3% OF ALL BIRTHS IN US

60% OF TWINS ARE DELIVERED BY CESAREAN SECTION NATIONWIDE
Increased C/S for Twins

• Concern about lower Apgars for second twin
• Concern about need for emergent c/s for the second twin – combined delivery
• Timing of delivery, need for staff
• Physician comfort level/expertise
• Patient convenience
• Physician convenience
Second twin

- Morbidity and mortality of second twin is higher regardless of mode of delivery
- Morbidity 3% in first twin vs 4.6 % in second
- Mortality is 0.3% vs 0.6%
ACOG

- Practice Bulletin # 56
- The route of delivery for twins should be determined by the position of the fetuses, the ease of fetal heart rate monitoring and the maternal and fetal status.
Vertex-Vertex

- 42% of all twins
- Well accepted that vertex vertex twins can be delivered safely and is the goal at any gestational age
- No evidence that C/S improves outcome
- Higher maternal morbidity for C/S and higher respiratory distress in neonate
- Morbidity and Mortality for second twin not improved
- 15-20% rate of second twin converting to non-vertex presentation
  - Recommend epidural
  - Recommend ultrasound guidance in delivery room
Implications of Combined Delivery

- Increased risk of endometritis, but was not statistically significant
- No difference in any neonatal parameter - Apgars, infection, complications, length of stay in one study but data is conflicting
- May be higher maternal infection rate
- Required in less than 4% of cases if Vtx/Vxt
- 2008, Maternal Fetal Medicine Unit
Non vertex presenting twin

- Approximately 20% of twin presentations
  - Breech / vertex – 7%
  - Breech/ Breech - 6%
  - Breech/Transverse - 5%
  - Transverse/Transverse - <1%

- One retrospective study found no difference in Apgars or neonatal mortality related to route of delivery if babies were >1500gm.
- Significantly higher morbidity rates were found if fetus weighed less than 1500 gm
- Interlocking chins is rare
- However, due to no prospective studies and general consensus, when the presenting twin is breech, we recommend C/S
Vertex, Non Vertex

• 38% of all twins
  ➢ Vertex/Breech=26%
  ➢ Vertex/Transverse=11%
  ➢ Vertex/Oblique=1%

• Options for delivery include:
  ➢ C/S
  ➢ Vaginal delivery with cephalic version of second twin
  ➢ Vaginal delivery with breech extraction

• For the delivery of term and late preterm twins, (1500 gm-4000 gm) in situations where the presenting twin is vertex and the second twin is either vertex or non vertex, there is a substantial body of evidence supporting planned vaginal delivery.
Gocke, et al-1989

- Retrospective study of 136 sets of vertex-nonvertex twins
- Internal podalic version and breech extraction yielded 96% success rate for vaginal delivery-only 4% had combined delivery
- External cephalic version had only a 46% success for vaginal delivery
Cochrane-2000

• C/S for delivery of a second twin not presenting cephalically is associated with increased maternal febrile morbidity with, as yet, no identified improvement in neonatal outcome

• Based on only one randomized trial of 60 women between 35-42 weeks
Twin Birth Study*

- Abstract presented this year at SMFM
- Prospective Randomized study
- 2804 twin pregnancies, with presenting twin vertex
- Between 32-38 weeks, 1500gm-4000 gm
- Randomized to vaginal delivery or C/S
- Death or serious morbidity occurred 2% of the time in both groups
- C/S was not safer for the second twin
- Combined delivery was 4%

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Contraindications to Breech extraction

• Estimated fetal weight of second twin is 20% or greater than the presenting twin
• Gestational age is less than 28 weeks or the estimated fetal weight is less than 1500 gm
• I personally do not proceed if the estimated fetal weight is less than 2000 gm due to possible ultrasound error
• Delivery of second twin suggests that the pelvis is not adequate for breech delivery
• Practitioner must be trained
Other considerations...

- Pitocin-appears to be effective, but there are inadequate studies to prove safety.
- VBAC-Available data is reassuring, however is insufficient to prove safety. Uterine rupture in one study was comparable to than of singleton VBACs.
- Continuous monitoring of both fetuses in labor is recommended.
- Epidural recommended.
- Deliver all twins in OR with capacity to do emergent C/S.
- Interval between delivery of both twins is not important as long and FHRT is reassuring.