



## Important things to know about the mode of delivery of multiplets

Dear parents-to-be,

You are expecting twins or even higher-order multiplets. Maybe you already reflect how your children will be delivered. Of course, you rely on the advice of your health care providers. In addition, we would like to share with you some general thoughts to understand essential aspects regarding the birth of multiples essential for any decision.

## **CHOICE OF BIRTH CENTER**

If you want to deliver vaginally, it is important to choose a center with experience and expertise in vaginal birth of multiples and to be assured that experienced specialists are also available 24 hours per week. When visiting the clinic, actively ask who will assist you during delivery and how many vaginal twin births this specialist has already conducted. The following indirect quality criteria are available: a) number of twin births/year, b) number of vaginal twin births related to the total number. In general, at least 50 twins/year should be delivered in a center and about 50% should be delivered vaginally. Each specialist who conducts vaginal twin births should already have experience of about 50 twin births. Involvement in master courses would be additionally helpful. Make sure these specialized obstetricians are in charge at any time. Neonatal problems may arise more frequently and require good care after birth. Therefore, also make sure that a pediatrician is available for each child at all times.

## CHOICE OF VAGINAL DELIVERY ROUTE

The following advice refers mainly to a gestational age after 32 weeks. Births before this time take place in a perinatal center level I or II, where you will then be advised depending on the special situation of (threatened) premature birth. The application of an epidural anesthesia should already be discussed during prenatal counseling. This is not only helpful for general pain treatment, but also mandatory for eventual internal maneuvers for the 2nd twin.

MEMBRANE CHARACTERISTICS: If there is no membrane between two multiples (monoamniotic twins), a planned cesarean delivery should be indicated because of the risk of cord complication. In case of monochorionic diamniotic and dichorionic diamniotic twins, there is no a priori contraindication to vaginal delivery. Nonetheless, antepartum complications of monochorionic twins such as twin-to-twin transfusion syndrome or (selected) growth retardation should be excluded. Similarly, severe growth differences in dichorionic twins or any poor condition should be excluded.

PRESENTATION OF THE CHILDREN: In general, if the first twin is in the cranial position (head down), there is no contraindication for a vaginal delivery. Even if the 2nd twin is also in vertex presentation, an experienced obstetrician should attend the delivery, since during delivery, unexpected situations may still arise that require cesarean delivery. The series of illustrations of a vaginal delivery shows how the obstetrician delivers the second twin in different presentations.











If the first twin

presents in a transverse presentation Cesarean delivery must be indicated. HISTORY OF CESAREAN DELIVERY: Also, if a mother has already had a Cesarean delivery, vaginal delivery is possible even in twin pregnancy.

## CHOICE OF ABDOMINAL ROUTE OF DELIVERY

There are secondary cesareans required although before, a vaginal delivery had been attempted. Primary cesarean or elective deliveries are planned before a vaginal delivery had started, which was excluded bas a mode of delivery beforehand.

To date, no scientifically based study has been able to prove the superiority of a cesarean as compared with a vaginal delivery in twin pregnancies with the first twin in vertex presentation. On the contrary, maternal risks and even injuries and infections are increased after a Cesarean delivery. Specialists' expertise is also required for cesarean deliveries of twins.