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Bleeding disorders in pregnancy

There are several bleeding conditions that occur in healthy women of child-bearing age. The most important conditions for us to monitor are haemophilia and Von Willebrand disease. If you have one of these conditions and are pregnant, you will need some specialist input. This leaflet aims to answer some common questions and to provide information about how these conditions are managed in pregnancy.

Haemophilia:

Haemophilia is a disease caused by a fault in genes, located on the X chromosome, which tells the body how to make the clotting factors needed to form a blood clot.

Men have one X and one Y chromosome (XY), while women have two X chromosomes (XX). A woman who inherits one affected X chromosome becomes a 'carrier' of haemophilia and she can pass the affected gene on to her children. In this case all her sons would have haemophilia, whereas 50% of her daughters would be a carrier.

Different clotting factors are affected in this condition. You can have either haemophilia A, B or C depending on which factors are missing. All types of haemophilia are managed in the same way.

If you have haemophilia disease or have affected boy babies you will be referred to John Radcliffe Hospital, Oxford to have your baby and will also get to see a haemophilia specialist, at Churchill Hospital, Oxford. This is because CT/MRI brain for affected baby is indicated soon after delivery (to look for bleeding in brain) which can only be done in our Tertiary Centre, Oxford.

What to expect before pregnancy

If you have a history of inherited bleeding disorders you will be offered pre-pregnancy counselling. This is done by Dr Nicola Curry/ Haemophilia specialist at Oxford and is not offered here. This helps you to discuss the options for diagnosis (if unsure) before you become pregnant, as well as to discuss other aspects of pregnancy management. Chorionic villus sampling (CVS), removing and testing a small sample of cells from the placenta (the organ linking the mother's blood supply with the unborn baby) is the optimal method for diagnosis before the baby is born. This is known as pre-natal diagnosis (PND). If you do not wish to have PND, it is strongly recommended that you find out the sex of your baby by ultrasound at your 20 week scan, as this can help you and your doctor plan delivery and aftercare for your baby. For example, if your baby is a boy the risk of internal head bleeding can be reduced by avoiding attaching a clip to the baby's head to aid monitoring during labour (fetal scalp electrode, FSE), or taking a small blood sample from the baby's head if there is any concern about your baby's well-being (fetal blood sampling, FBS), or any potentially difficult instrumental delivery

What to expect during pregnancy

If you are a carrier and your baby does not have the haemophilia disease, then your pregnancy will be booked under consultant-led care at RBH and managed in close liaison with the haematologist at RBH as well as at the Haemophilia Centre at Oxford. You will be seen at least twice during your pregnancy, with your first visit around booking time and then again around 34 weeks, as well in Oxford. You will also have regular blood tests at booking, and at 28 and 34 weeks to check the levels of your clotting factors. You will also be referred to see an anaesthetist to discuss your options for pain relief in labour, including an epidural if you wish to have one. If you have severe haemophilia and a know you are carrying a boy, it will be recommended for you to deliver in Oxford as you will require close monitoring of your clotting factors and investigations of your baby after birth.

What to expect during labour

We recommend that you have your baby on Delivery Suite as opposed to delivering at home or in the birth centre, due to the risk of bleeding following delivery. Many measures can be taken to reduce the risk of bleeding, such as minimising any trauma to you during delivery, and giving an injection to help separate the placenta after your baby is born. If your baby is at risk of bleeding (either a boy or unknown sex), as mentioned previously, there are certain measures that are to be avoided during labour. These include applying a clip to the baby's head to aid monitoring during labour (FSE), or taking a small blood sample from the baby's head if there is any concern about the baby's well-being (FBS). Also, any help needed with delivering your baby will be affected as the ventouse cup (delivery with a suction cup) cannot be used. Above measures if undertaken could lead to bleeding in baby's brain in babies who have haemophilia disease.

What to expect after delivery

If your clotting factors were low around the time of delivery, you may need treatment with clotting factors for a few days following delivery to reduce the risk of bleeding.

Blood will be taken from the umbilical cord to test the level of clotting factors in your baby. If your baby is at risk, unnecessary injections and blood tests will be avoided. This includes the Vitamin K injection which is recommended for all babies when they are born to reduce their risk of bleeding; this is recommended to be given orally instead if your baby is considered at risk.

Some babies may need a special scan of their head called a CT scan, for example if your baby was born early or if the labour was long, to make sure there has been no bleeding inside baby's head. All babies affected by any inherited bleeding disorder will be registered and followed up at the Oxford Haemophilia and Thrombosis Centre.

Von Willebrand disease:

This is the most common inherited bleeding disorder in pregnancy; most patients are only very mildly affected. There are three different types: type 1 VWD1, type 2 VWD2 and type 3 VWD3. Regardless of the type, the principles for the management of your pregnancy are similar to those of carriers of haemophilia as explained above.

What to expect during pregnancy

Your antenatal care will be booked under a consultant in conjunction with other specialists, including a haematologist and anaesthetist. You will be seen at booking and again at 28 and 34 weeks when your clotting factors will be checked. If your clotting factor levels are low before an invasive test, for example CVS or before delivery, you may need preventative treatment with clotting factors. Sometimes a medication called Desmopressin is given in labour for this purpose.

What to expect during labour and delivery

If you have type 2 VWD, you will need preventative treatment only if you are going to have a Caesarean section or if there is any trauma to the birth canal. Women with type 3 VWD will need preventative treatment regardless of the type of birth they are having. During labour and delivery, as with haemophilia, no FBS or FSE will be used. Only very straightforward forceps will be used, if needed, to help delivery of the baby's head, with complete avoidance of ventouse delivery (delivery with a suction cup). An epidural is not recommended for types 2 or 3 VWD, but should not be a problem with type 1 VWD. Following the birth of your baby, it is recommended that you have an injection to help deliver the placenta and reduce the risk of you bleeding.

What to expect after delivery

A cord blood sample will be taken after birth to check if your baby is affected or not. As with haemophilia, unnecessary injections and blood tests will be avoided until the clotting status of your baby is known. It is recommended that your baby receives the oral dose of Vitamin K instead of the injection. Routine immunisations will be given more superficially into the skin (intra-dermally or subcutaneously). If you are planning on circumcision, this should be delayed until the clotting status of your baby is known.

Further information

- http://haemophilianetwork.org.uk/Bleeding-Disorders/My-Bleeding-Disorder/Baby/Before-You-Have-a-Baby.aspx
- https://hemaware.org/story/questions-answered-about-pregnancy-and-bleeding-disorders

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Please ask if you need this information in another language or format.

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