Because the placenta and the baby come from the same cells, they have exactly the same amount of chromosomes most (98-99%) of the time. In approximately 1-2% of all pregnancies, the placenta can actually have a different chromosome makeup from the baby. This is called confined placental mosaicism (CPM).

When it comes to genetic testing, CPM is important to remember particularly when it comes to CVS procedures. If someone has a CVS and the results show an extra or missing chromosome, we know that the most likely thing is that the pregnancy also has that extra or missing chromosome. However, 1-2% of the time, that extra or missing chromosome is only found in the placenta and not in the pregnancy.

The exact reason for this difference is unknown, but it is thought that after the placenta and the baby separate, some sort of error happens during cell division in the placenta, which causes some of the cells to have an extra or missing chromosome.

If CPM is suspected on a CVS result, it may be recommended to perform an amniocentesis procedure to confirm. Because the cells obtained from an amniocentesis are from directly around the baby, it is more accurate in determining whether the pregnancy actually has the extra or missing chromosome.

Click here to learn more about scheduling a genetic counseling appointment for pregnancy-related questions.

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