



Saint Mary's Hospital

**NHS**

**Manchester University**  
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## **Chronic Histiocytic Intervillositis**

### **A Leaflet for Mothers**

#### **What is Chronic Histiocytic Intervillositis?**

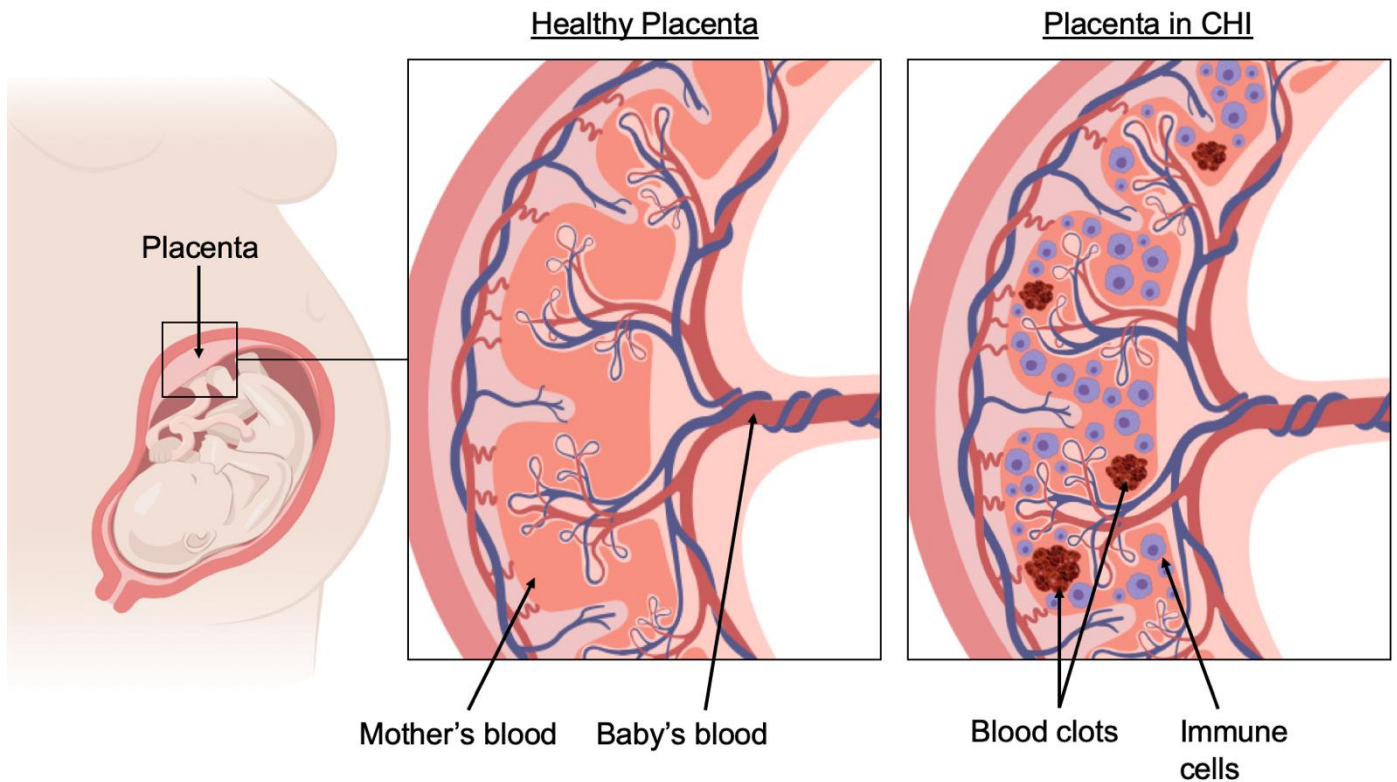
Chronic histiocytic Intervillositis (CHI) is a condition which may affect the placenta (afterbirth) at any stage of pregnancy. The cause(s) are unknown, but we do know the mother's immune system reacts abnormally to the pregnancy and causes damage to the placenta. CHI increases the risk of a miscarriage, having a smaller baby and the chance that the baby will either die in the womb or shortly after birth. It is rare but often comes back in following pregnancies. This means that these subsequent pregnancies need specialist care.

#### **The Healthy Placenta**

The placenta is an organ attached to the wall of the uterus (womb) during pregnancy which provides a connection between you and your baby. It allows oxygen and nutrients from your blood to be transferred to your baby, as well as waste products to be passed back to your body for disposal. The placenta also produces hormones which help with your baby's growth and development. The placenta shares its genetic make-up with your baby; half of the genes are from you and half from the father. Under normal circumstances this foreign organ would be enough to trigger your immune system. However, in healthy pregnancies the placenta has several ways to avoid this immune response.

#### **The Placenta in CHI**

In CHI, immune cells from the mother (called macrophages or histiocytes) build up in the placenta and create blood clots where the mother's blood usually flows (see figure). We do not fully understand why this happens, but there are similarities with organ rejection following a transplant. The immune cells and blood clots are thought to stop oxygen and nutrients from reaching the baby and thereby affecting its growth and development. In some cases this is so severe that the babies are unable to survive, and are miscarried (defined as up to 23 weeks of pregnancy in the UK) or are stillborn (after 24 weeks).



## Symptoms and Treatment of CHI

Women with CHI show no symptoms, and unfortunately the condition cannot be diagnosed until after birth, when the placenta is examined by medical professionals called pathologists. There is some evidence that an enzyme made by the placenta, called Alkaline Phosphatase, may be higher in cases of CHI, but we don't know whether this is a reliable test. If you have previously had a pregnancy affected by CHI, the condition may return in future pregnancies (although the chance of this happening is still unclear). Because of this risk of CHI affecting another pregnancy, it is likely that you will be prescribed medication to reduce the immune cells and blood clots in your placenta. At St Mary's Hospital, these drugs include Aspirin, Heparin, Hydroxychloroquine and Steroids. You'll also be offered extra monitoring of your baby's growth by ultrasound scans during your following pregnancies, to more closely track your baby's growth and development.