

## Managing placental disorders for a healthy pregnancy.

Kaviyarasi Dey\*

Department of Biomedical Sciences, University of Vellore of Technology (VIT), Vellore, Tamil Nadu, India

### Introduction

The placenta plays a crucial role in pregnancy, serving as the lifeline between the mother and the developing fetus. When the placenta encounters problems or disorders, it can have serious implications for both maternal and fetal health. In this article, we will discuss various placental disorders, their potential complications and strategies for managing these conditions to ensure a healthy pregnancy. Placental abruption means the placenta has detached (come away) from the wall of the uterus, either partly or totally. This can cause bleeding in the mother. It may also interfere with the unborn baby's supply of oxygen and nutrients, which the placenta provides from the mother's bloodstream through the lining of the uterus [1].

Doctors cannot reattach the placenta. Without prompt medical treatment, a severe case of placental abruption can have dire consequences for the mother and her unborn child, including death. Worldwide, placental abruption occurs in about one pregnancy in every 100. In about half of cases, placental abruption is mild and can be managed by on-going close monitoring of the mother and baby. About 25 per cent of cases are moderate, while the remaining 25 per cent threaten the life of both baby and mother. Placental disorders encompass a range of conditions that affect the structure, function, or location of the placenta during pregnancy. Three common placental disorders include placenta previa, placental abruption and placental insufficiency [2].

Placenta previa occurs when the placenta partially or completely covers the cervix, potentially obstructing the baby's exit during delivery. This condition can lead to bleeding, pain and complications during labor. Placental abruption involves the premature separation of the placenta from the uterine wall before delivery. It can result in severe bleeding and fetal distress. Placental insufficiency occurs when the placenta doesn't provide an adequate blood supply and nutrients to the fetus. This condition can lead to intrauterine growth restriction (IUGR) and developmental issues [3].

Managing placental disorders is crucial for the well-being of both the mother and the baby. Here are some key strategies for managing these conditions: Early prenatal care and regular check-ups are essential for detecting placental disorders. Ultrasound scans and other diagnostic tests can help identify these conditions in their early stages. Pregnant individuals diagnosed with placental disorders should be

closely monitored by healthcare providers. Frequent check-ups, fetal monitoring and regular ultrasounds can help assess the condition's progress and the baby's well-being.

### Diagnosis

Blood tests, which allow the doctors to determine the baby's alpha-fetoprotein levels (AFP) (a protein in the baby's liver). An ultrasound, which allows your doctor to view your placenta, estimates its size and measure how big the baby is. NST (fetal no stress test), a test that involves keeping track of how fast your baby's heart is beating. If you have been pregnant for over six months the doctor may measure the size of your belly to determine whether your baby is growing appropriately. Quick detection of anything wrong with the placenta will improve your baby's chances. Always consult a professional when you suspect something is wrong with your baby. Depending on the severity of the placental disorder, healthcare providers may recommend bed rest or reduced physical activity to minimize the risk of complications such as bleeding or premature labor [4]. In some cases, medications like anticoagulants or tocolytics may be prescribed to manage specific symptoms or complications associated with placental disorders. If severe bleeding occurs due to placental abruption, a blood transfusion may be necessary to replace lost blood and maintain maternal and fetal health. For cases of placenta previa or severe placental disorders that pose a risk during vaginal delivery, a C-section may be recommended to ensure a safe delivery.

Babies born to mothers with placental disorders may require specialized neonatal care to address potential complications such as prematurity or low birth weight. Pregnant individuals with placental disorders are often advised to make lifestyle changes, such as quitting smoking and avoiding alcohol, to reduce the risk of further complications. Proper nutrition is essential for both maternal and fetal health. Healthcare providers may recommend dietary changes or supplements to ensure adequate nutrient intake [5].

### Conclusion

Placental disorders can be challenging to manage, but with early detection, close monitoring and appropriate medical interventions it is possible to navigate these conditions while prioritizing the health of both the mother and the baby. Pregnant individuals with placental disorders should work closely with their healthcare providers to develop a personalized management plan tailored to their specific

\*Correspondence to: Kaviyarasi Dey, Department of Biomedical Sciences, University of Vellore of Technology (VIT), Vellore, Tamil Nadu, India, E-mail: deyarasi@vit.ac.in

Received: 20-Aug-2023, Manuscript No. AAGGS-23-112659; Editor assigned: 22-Aug-2023, PreQC No. AAGGS-23-112659(PQ); Reviewed: 07-Sep-2023, QC No. AAGGS-23-112659; Revised: 10-Sep-2023, Manuscript No. AAGGS-23-112659(R); Published: 18-Sep-2023, DOI:10.35841/2591-7994.7.5.164

condition and circumstances. By following these strategies and guidelines, individuals can increase their chances of achieving a healthy pregnancy outcome despite the presence of placental disorders.

## References

1. Fisher JJ, Bartho LA, Perkins AV, et al. Placental mitochondria and reactive oxygen species in the physiology and pathophysiology of pregnancy. *Clin Exp Pharmacol Physiol* 2020;47(1):176-84.
2. Ricci CA, Reid DM, Sun J, et al. Maternal and Fetal Mitochondrial Gene Dysregulation in Hypertensive Disorders of Pregnancy. *Physiol Genom.*2023.
3. Jones AR, Tuckwell C, Wright IM, et al. The impact of maternal asthma during pregnancy on offspring retinal microvascular structure and its relationship to placental growth factor production in utero. *Microcirculation.* 2020;27(6):12622.
4. Ortega MA, Fraile-Martinez O, García-Montero C, et al. Evidence of increased oxidative stress in the placental tissue of women who suffered an episode of psychosis during pregnancy. *Antioxid.* 2023;12(1):179.
5. Belovic DK, Plesinac S, Dotlic J, et al. Biochemical markers for prediction of hypertensive disorders of pregnancy. *J Med Bio Chem.* 2019;38(1):71.