

Rh incompatibility in Odisha comes down significantly: All thanks to awareness of screened for Rh typing

Cuttack, 25th June 2021: With increased awareness of the complications of Rh incompatibility in women and fetal health, doctors say that the prevalence of isoimmunisation in the urban cities of Odisha has come down significantly by 5 percent from its earlier two-digit incidences. Women are mandatorily screened at the onset of their pregnancy to minimize the menace of Rh iso-immunisation that often leads to complications such as pregnancy loss, fetal anemia and neurological disorders in newborns.

Not only the child but also a negative Rh factor mother is prone to certain blood type related complications during the delivery if they haven't undergone Rh factor testing.

DR Sanghamitra Dash, Joint Director, Life Institute of Gastroenterology and Gynaecology, Cuttack, Odisha, said in Odisha male partners are equally aware about this condition and that has led to a single digit prevalence of just 5 percent cases of Rh incompatible. "The incidence of Rh iso-

immunisation has come down tremendously in the last couple of years. But the negative cases are still there in India. Currently, in our state it's 5 percent only. I am getting the awareness level in the Rh negative male partners, who also ask me whether their negative report will affect the fetus. With the advent of the internet, they now know the disadvantage of negative," said DR Sanghamitra Dash

Rh incompatibility is a condition in which a mother with an Rh Negative blood type (such as O Negative, A Negative, B Negative etc.) conceives a child with Rh Positive blood type (such as O Positive, A Positive and B Positive etc.). This condition can cause serious challenges for fetal health.

Rh Factor or Rhesus factor is a genetically inherited protein found on the surface of the red blood cells. People who inherit this protein are Rh Positive while those who do not are Rh Negative. In case of Rh incompatibility (when a woman with Rh Negative blood type conceives a Rh Positive

child), the mother's immune system can perceive the fetal red blood cells with D Positive blood group as a foreign protein and develop antibodies against it. Rh antibodies made in a woman's body can cross the placenta and attack the Rh factor on fetal red blood cells, causing a series of potentially devastating effects on fetal health.

However, the doctor states the testing of Rh factor has gone through a metamorphosis. Now, we also have noninvasive testing procedures.

"Rh incompatibility treatment is a very long course. The whole treatment procedure is changed now if we compare it with couple of years ago. And, mostly we have come from not doing anything to invasive things and now with noninvasive procedures. This is a step up of treatment which we have been witnessing from last couple of years. We first do a blood group testing of the mother. And, in most of the cases both the partners undergo the test. If mother is positive, partner's blood group is least important



for us. If mother is negative and partner is negative then there is no worry for the future. Whereas, if the partner is positive and mother is negative, then at 12 weeks of gestational age we perform ICT testing (indirect coombs test) and repeat test at 28 weeks of age. If ICT negative then ANTI - D Immunoglobulin is given and which is repeated after birth of baby. In Iso-immunised mother, we have progressed from amniocentesis to free fetal DNA testing, total antibody assay, antibody titre, Doppler ultrasound of fetus, cardio-tocography, cordocentesis, Intra uterine transfusion, These have

revolutionized the management of iso-immunisation.

Rh iso-immunisation can be a threat to baby's life by leading to severe anemia and immune hydrops (multi-organ failure due to excessive destruction of RBCs). It also increases repeated visits, investigations, interventions, NICU admissions, costs and stress to the family. However, the good news is that this can be prevented in most cases with effective and timely intervention. The treatment of Rh incompatibility depends on level of anemia and gestational age of the baby.