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## **KZN health MEC applauds medical team involved in the birth of miracle heart operation baby**

KWAZULU-Natal Health MEC Dr Sibongiseni Dhlomo has applauded the medical team involved in the successful delivery of an infant who had life-threatening fluid extracted from his heart cavity - while still inside his mother's womb.

The baby boy, who is yet to be named, was born by caesarean section at Inkosi Albert Luthuli Central Hospital (IALCH) yesterday (02 November 2016) at 09h45, in excellent condition, weighing 2,8kg yesterday.

His arrival marked an exciting new phase in the story of a new life that was nearly claimed by an extremely rare foetal cardiac condition, whereby a vascular malformation in the outer chamber of the heart was causing fluid to leak into the space around the heart (the pericardial space).

The fluid was compressing the heart and lungs, which was affecting the foetus' cardiac contractility (the ability of the heart muscle to generate force and to shorten, regardless of changes in heart rate). This could have led to cardiac arrest and an intra-uterine foetal death.

Dr Ismail Bhorat, Head of the Foetal Unit at IALCH, who performed surgery to extract the fluid from the foetus, described this as an extremely rare case, with only 22 others reported worldwide. The condition is seen in only one in 300 000 pregnancies.

Reflecting on his first impressions of this case, Dr Bhorat said: "I could not actually believe what I was seeing during the foetal ultrasonic scan as this condition is so rare. I was astounded. However, the reality of the scenario dawned on us very quickly that we needed to intervene, otherwise we were going to lose the foetus."

The medical team needed to perform a procedure called foetal pericardiocentesis, which would entail extracting fluid from around the foetal heart to relieve the compression on the heart.

The surgery would entail a precise path of needle insertion into the pericardial space that would allow them to extract the fluid and relieve the compression of the heart.

It required intricate planning, including mapping out the heart so as to avoid vital structures in their attempt to extract the fluid around the heart. With no precedent to refer to, due to the rarity of the condition, this presented a major challenge.

Fortunately, Dr Bhorat has been practicing as a Foeto-Maternal Specialist for the past decade, and holds a PhD in Foetal Cardiology: Foeto-maternal Medicine, which is a sub-speciality of Obstetrics and Gynaecology. He has been involved in foetal surgery for other conditions since 2012, all of which means he had a considerable level of experience to draw on for this operation.

"After about 45 minutes of scanning to precisely map the foetal heart, establish the path of insertion of the needle and to attempt to get the foetus into an optimal position for the procedure, a small window was eventually found that in fact gave us access to the pericardial space. When this was established I was pretty confident of a successful procedure," Dr Bhorat says.

The foetal pericardiocentesis was then successfully performed - the needle safely and successfully inserted into the pericardial space. About 30ml of fluid was extracted.

"The results were dramatic, where we had almost complete resolution of the pericardial fluid, dramatic improvement of foetal cardiac contractility and heart rate and overall dramatic improvement in the foetal clinical condition. The entire procedure, with planning lasted, approximately 90 minutes."

Dr Borhat says that absolute credit must be given to the vigilant Sister P.S Goge from Shakaskraal Clinic who first picked up a clinical anomaly from the baby during mother Thandazile Ntetha's antenatal clinic visit at 29 weeks. The baby was transferred to Stanger Hospital and, eventually, referred to IALCH. The miracle surgery was conducted on Shakaskraal mother Thandazile Ntetha, 29, who experienced difficulties in her pregnancy at 29 weeks.

He says that the importance of regular antenatal check-ups for pregnant women cannot be overemphasised, as early detection of anomalies leads to early therapy and better outcomes.

"It is imperative that pregnant women book early with the first visit in the 1st trimester to correctly date the pregnancy and to diagnose chromosomal anomalies; and undergo a second trimester congenital anomaly scan which is a 'must' scan and thereafter regular check-ups to diagnose obstetric syndrome like hypertension in pregnancy (pre-eclampsia) or failure of growth of the foetus (growth restriction) or other obstetric conditions."

Dr Borhat says both mother and baby are healthy. The infant will be monitored in the Neonatal Intensive Care Unit for the next few days, but no major challenges are anticipated.

The baby's mother, Thandazile Ntetha, thanked the Department of Health for providing her with the highest level of care throughout her pregnancy.

MEC Dhlomo congratulated Dr Borhat and his team, saying that the successful pericardiocentesis and birth delivery once again proved that government hospitals have health professionals of a standard that is comparable to any other.

"We are very happy that this story has had such a happy ending. The medical expertise displayed in providing healthcare to this baby, once again underscores what we always say... that that our public hospitals have some of the best specialists in the world."

ENDS



*Dr Ismail Borhat, with his assistant Dr Samantha Bhudram, and the newly-born baby boy.*