

Transient Severe Oligohydramnios With Acute Diarrhoea in A Pregnant Woman, With Amniotic Fluid Reaccumulation After Maternal Oral Hydration

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Normal amniotic fluid volume is an important indicator of fetal growth and well being, and oligohydramnios is a sign causing grave trepidation to the obstetrician. Fetal urination, fetal swallowing and transudation are known factors that take part in formation of amniotic fluid. Recently, it has been shown that the maternal hydration status also plays an important role in the maintenance of normal "steady-state" amniotic fluid volume.

Transient oligohydramnios has been earlier reported in a 35 weeks gravid woman with severe hypovolemia due to dehydration. Immediate reaccumulation of amniotic fluid occurred after intravenous maternal hydration. We report here a case of normal pregnancy who had transient severe oligohydramnios following acute diarrhoea, with normalisation of amniotic fluid volume after maternal rapid oral hydration.

Case Report

A 29 years old second gravida presented to our emergency antenatal unit at 34 wks of gestation with pain in abdomen and diarrhoea for the last 8 hrs. Pain was generalised over the abdomen, moderate and colicky in nature. She had increased frequency of Braxton Hicks contractions, 4-5, hour. The abdominal pain was unrelated to the occurrence of uterine painless contractions. She had had 5 episodes of watery stools, but there was no blood or mucus. She did not have vomiting or fever associated with diarrhoea. Her antenatal period had been uneventful with clinically and ultrasonographically normal fetal growth.

On examination, there were no clinical signs of dehydration, her vitals were normal, and there was no

pallor or icterus. Her systemic examination was within normal limits. Her abdominal examination corroborated with the period of gestation. On ultrasonic evaluation for fetal monitoring, she was found to have severe oligohydramnios, Amniotic Fluid Index (AFI) 2 cm. There was no evidence of fetal growth retardation and placenta was Grade II. The amniotic fluid had been adequate (AFI 12.5 cm) 5 days prior to the present episode.

Patient was admitted for uterine contraction and fetal monitoring. Attributing the cause of acute severe oligohydramnios to the diarrhoea, she was started on oral hydration therapy, along with strict fetal monitoring. She was instructed to drink at least 1 litre of water per hour and more if she could tolerate it. The patient was very compliant, and drank plenty of water (approximately 15 litres over day and night).

To our surprise, the amniotic fluid volume increased dramatically to AFI 12.1 cm after 24 hrs. Her uterine contractions had subsided, and she had only 2 episodes of loose stools after admission. The patient was observed for 48 hrs, during which her amniotic fluid volume remained adequate. She was discharged with the advice to continue taking adequate fluids. Subsequently, she had an uneventful antenatal period and delivered a healthy baby of 3.4 kg appropriate for date at 38 wks 4 days.

Thus, maintenance of normal hydration status is a very important aspect of antenatal care for sustenance of normal amniotic fluid volume required for fetal well being. Adequate fluid intake should be emphasized in Indian women who may drink less fluids due to scarcity of water, and who are prone to diarrhoea and vomiting. Acute oral hydration successfully increased the amniotic fluid volume in a woman who was dehydrated due to acute diarrhoea.