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# Severe Oligohydramnios with Good Fetal Outcome- A Case Report

By Dr. Sampada & Dr. Tushar Palve

*Introduction-* Amniotic fluid provides a protected milieu for the growing fetus, cushioning the fetus against mechanical and biological injury, supplying nutrients and facilitating growth and movement.

Oligohydramnios is defined as a single pocket measuring 2 cm in both vertical and horizontal planes or AFI less than 5 cm.

Incidence of oligohydramnios varies between 0.5 to > 5 %.

Causes of oligohydramnios:

- Maternal postdated pregnancy, PPROM, hypertension, autoimmune disorders and maternal medications like prostaglandin synthetase inhibitors.
- Fetal- IUGR, fetal anomalies particularly of renal tract. Most commonly associated include bilateral renal agenesis, multicystic dysplastic kidneys, bladder outlet obstruction and infantile polycystic kidney disease.
- Other factors noted to affect are maternal hydration and fetal presentation.
- As per some reports Change of Breech to cephalic presentation has shown increase in AFI.

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## Severe Oligohydramnios with Good Fetal Outcome- A Case Report

Dr. Sampada <sup>a</sup> & Dr. Tushar Palve <sup>o</sup>

#### I. INTRODUCTION

A mniotic fluid provides a protected milieu for the growing fetus, cushioning the fetus against mechanical and biological injury, supplying nutrients and facilitating growth and movement.

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Adverse perinatal outcomes associated with oligohydramnios are – structural anomalies, SGA, umbilical cord compression, uteroplacental insufficiency, which is related to fetal growth restriction, preeclampsia and other maternal morbidities and increased incidence of MSAF.

#### II. Case Report

27 yr female, married since 12 yr, G5P4L2NND2, registered and immunised came to ANC opd with USG obs s/o AFI 0.3 cm at 28 weeks of gestation breech presentation with EFW- 1200 gms.

#### Targetted AFI was 0+0+0+0.3 cm.

Patient was admitted in ANC ward and evaluated for oligohydramnios. O/E, patient had clinical oligohydramnios with fetal parts easily palpable. Congenital anomaly scan was done which was suboptimal due to advanced gestational age. Patient was given 1 pint alamine with D5. USG obs was done which was s/o SLIUG of MGA 28.3 weeks with AFI- 2cm

with normal doppler with EFW-1272 gms with cephalic presentation.

Adequate intravenous and oral hydration was maintained. Patient was started on cap astymineforte tds, arginine granules tds and protein powder which was continued till delivery. 2 more pint alamine was transfused along with D5.

Serial USG obs with targetted AFI was done, which showed adequate liquor.

- USG obs 10.1.19- s/o SLIUG of MGA 32.4 weeks with adequate AFI 13-14 cm with normal doppler with EFW- 2035gms with cephalic presentation.
- USG obs 2.2.19- s/o SLIUG of MGA 33.6 weeks with AFI- 12-13 cm with EFW- 2209gms with cephalic presentation.
- USG obs 16.2.19- s/o SLIUG of MGA 36 weeks with AFI- 11-12 cm with EFW- 2798gms with cephalic presentation.

Patient was closely monitored and advised regular ANC visits. FHS/NST monitoring done. DFKC charting was explained to patient. Patient was admitted at 37 weeks of gestation for safe confinement.

A full term male child weighing 2682 kg delivered by emergency LSCS in view of PROM with transverse lie at 38 weeks of gestation. Baby cried immediately after birth with good APGAR score of 8/10 at 1 min and 9/10 at 5 min of birth. Baby was discharged after routine immunisation with uneventful early neonatal period.

#### III. DISCUSSION

Management depends on the associated pregnancy complication and on the gestational age. when remote from term the endeavour is to prolong the pregnancy with close fetal monitoring.

Nearer term, pregnancy termination is planned with assessement of risk to fetus. Continuous intrapartum fetal heart rate monitoring is offered, if facilities exists, to detect early signs of hypoxia and perform timely intervention.

In our case, oligohydramnios was detected in third trimester but remote from term which was actively managed with alamine infusion, adequate hydration and IUGR regimen. There was change of presentation seen from breech to cephalic in successive scans. Pregnancy was prolonged enough for fetal maturity which resulted in a good fetal and maternal outcome.

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A study "Maternal and fetal outcome in oligohydramnios - study of 100 case" was done from May, 2009 to Nov, 2011, which included 100 patients in 3rd trimester of pregnancy with oligohydramnios. Incidence was seen more in primigravida and operative intervention was also more in primigravida. Most common reason to perform caesarean was fetal distress which was due to coordinate compression and IUGR. Oligohydramnios was related to growth retardation and NICU admission. Approx 7% patients were found with fetoplacental insufficiency on Doppler study.

Another study "Maternal and perinatal outcome in oligohydramnios- study from a tertiary care hospital, Banglore, Karnataka, India" done from Nov, 2015 to April, 2016 which included 410 pregnant women of gestational age > 37 weeks. Incidence of oligohydramnios was found to be 14%. 62% underwent LSCS with fetal distress bring most common indication for it. Incidence of low birth weight was 38.6%.  $1/4^{th}$  of them had APGAR score < 7 at 1 minute. 40% babies were admitted to NICU.

### IV. CONCLUSION

- To conclude, oligohydramnios is generally associated with either maternal comorbidities or fetal anomalies, both were not seen in our case.
- Expectant management with maternal hydration, alamine infusion etc has comparable maternal and neonatal outcome in women with isolated idiopathic oligohydramnios.