

# Case Report on Oligohydramnios

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## Abstract

**Introduction:** Oligohydramnios is an extremely rare condition where there is a deficiency of liquor amnii in the amount of less than 200ml at the time of delivery. Sonographically, it is a maximum vertical pocket of liquor is < 2 cm or the amniotic fluid index is < 5 cm (less than 5 percentiles) is specified.

**Patient History:** A 23 years old ANC & 8 months mother was admitted on 11.9.2019 with the complaints of reduced fetal movements and abdominal discomfort.

**Past History:** Patient has history of blood transfusion 3 months back and has history of cervical cerclage at 7 months of pregnancy.

**Clinical Findings:** Reduced fetal movements, abdominal discomfort, leaking of the amniotic fluid, low amniotic fluid on ultrasound, low maternal weight gain, pre labor rupture of membranes.

**Investigations:** Ultrasonography (AFI=5cm), Hb% - 9.1gm%, MCV-74, MCH-23.5pico/gm, HCT-28.5%, Total WBC Count – 8000/cu.mm, Lymphocytes- 20%.

**Surgical Management:** Patient does not have any past surgical history.

**Medical Management:** Tab. AFI plus BD, L- Arginine sachet 5gm/BD/orally, Tab. iron OD, Tab. Calcium OD.

**Nursing Management:** Assess both maternal and fetal conditions carefully, fetal heart rate and vital signs should be assessed properly. During labor, an amnio-infusion should be given via intrauterine catheter. Fluid should be administered via amniocentesis before giving birth. The level of amniotic fluid may help by increasing the amount of oral fluid intake.

**Conclusion:** Patient was admitted to AVBRH and was diagnosed as oligohydramnios and got appropriate treatment and her condition has improved.

**Keywords:** Oligohydramnios, amniotic fluid, cervical cerclage, amniocentesis.

## Introduction

Oligohydramnios is a disease characterized by an amniotic fluid deficit during pregnancy. Oligohydramnios is an extremely rare condition where there is a deficiency of liquor amnii in the amount of less than 200ml at the time of delivery. Sonographically, it is a maximum vertical pocket of liquor is < 2 cm or the amniotic fluid index is < 5 cm (less than 5 percentiles) is specified<sup>1</sup>.

**Patient Identification:** An ANC mother of 23 years old with 32.2 weeks gestational age from Hinganghat was admitted to ANC 12, AVBRH on 11<sup>th</sup> sept, 2019 with a complaints of reduced fetal movement, pain in abdomen and lower back area. After all the investigations, she was diagnosed as oligohydramnios.

**Present History:** Patient was apparently admitted in AVBRH on 11/9/2019 with a chief complaints of pain

in abdomen, pain in the lower back and reduced fetal movement.

**Past History:** Patient has history of mild anemia 3 months back where she has undergone the blood transfusion and she has history of cervical cerclage in 7 months of pregnancy for which the patient was hospitalized, she complains pain in lower back and reduced fetal movement since 1 month back and came to AVBRH for further management.

**Past interventions and outcome:** My patient was diagnosed as oligohydramnios at 7 months of pregnancy where cervical cerclage has done at that time, from that time onward patient was admitted to hospital time to time for treatment. The treatment was found effective as the patient does not develop complications till then.

**Obstetric History:**

**Menstrual History:**

Age of menarche- 14 years

Duration of menstrual period- 3-4 days

Duration of cycle in days- 28 days

Regularity- regular

LMP – 28/6/19

EDD – 4/3/2020

POG – 32.2 wks

*Antenatal assessment-*

Weight – 45 kgs

Height – 15 cm

Edema – absent

Previous no. of antenatal visits – 2 visits

Treatment – patient has taken 2 doses of TT injection, and she's taking iron and calcium tablets.

**Clinical Findings:** Reduced fetal movements, abdominal discomfort, leaking of the amniotic fluid, low amniotic fluid on ultrasound, low maternal weight gain, pre labor rupture of membranes.

**Etiology:**

1. *Fetal conditions-* fetal chromosomal or structural

anomalies, renal agencies, obstructed uropathy, spontaneous rupture of the membrane, intrauterine infection, post maturity, intrauterine growth retardation.

2. *Maternal conditions* - hypertensive disorders, uteroplacental insufficiency, dehydration, idiopathic.

Investigations:

1. CBC

- HB% - 9.1 gm%
- Total RBC Count – 3.87 mil/cu.mm
- Total WBC Count – 8000/cu.mm
- Total platelets count – 1.83 lacs/cu.mm

2. LFT

- Total bilirubin – 0.6 mg/dL
- SGPT – 20 U/L
- SGOT – 40 U/L

3. USG

- Single cell uterine fetus with 32.2 wks with oligohydramnios
- AFI = 5CM

**Therapeutic Intervention:**

1. First trimester – counselling, serial USG
2. Second trimester – counselling, consider amnioinfusion, serial USG, termination of pregnancy SOS
3. Third trimester – deliver post term cases, serial USG & Doppler in IUGR, conservative management for protein pre-labor rupture of membranes till 34 weeks.

**Medical Management:**

- Tab. AFI plus BD
- L- Arginitrate sachet 5gm/BD/orally
- Tab. iron OD
- Tab. Calcium OD

**Nursing Management:**

- Assess both maternal and fetal conditions carefully, fetal heart rate and vital signs should be assessed properly. During labor, an amnio-infusion should be given via intrauterine catheter.

- Fluid should be administered via amniocentesis before giving birth.
- The level of amniotic fluid may help by increasing the amount of oral fluid intake.

### Discussion

The patient 23 years old was apparently admitted in AVBRH on date 11/09/2019 . patient complaints of pain in the lower abdomen, lower back and decreased fetal movement, as she has complaints all this things patient was undergone several investigations like blood investigation, ultrasonography. After all this investigation patient was diagnosed as oligohydramnios where her amniotic fluid index(AFI) was 5cm. The condition of patient was improved after getting care by various multidisciplinary health care team. She was admitted in the ANC ward for further management<sup>2,3</sup>.

Aclinical trial on oligohydramnios during the third trimester of pregnancy was done in 2012 at Moradabad city, U. P. The results shows that 24. 583. 99 SD was the patient mean age and out of these 46. 15% were the age between 21-25 years. 36%were primigravida and 64% patients were multigravida. Among 78 pregnant women 74% was mild oligohydramnios and 25% was severe. Around 68% were preterm delivered which means who delivered before completing 37 weeks of gestational age. 72% cases were delivered by caesarean section, out of all these 51% were due to fetal distress, 33% were normal Cardiotocography (CTG) and 66% were abnormal at the time of admission. The normal colour of the amniotic fluid was found in 69% cases at the time of membrane rupture whereas 31% cases meconium stained was found. Mostly, in severe oligohydramnios the chances of caesarean section was high than the mild and moderate oligohydramnios group. Perinatal outcome like Apgar score, weight of the baby, meconium aspiration syndrome, respiratory distress syndrome and neonatal ward admission.65% cases were found to be low birth weight baby among 78 newborn babies. Among 78 babies, 21 babies APGAR score was less than 7 at 5 minutes. Respiratory distress syndrome was suffered by 15% babies and 10% were suffered meconium aspiration syndrome. Due to all these complications 15 babies were admitted to NICU<sup>4,5</sup>.

Oligohydramniosis well known to be associated with high adverse risk during the perinatal period. However, it is a poor indicator for the adverse effects during this period. But it is also used as a predictor for delivery<sup>6,7</sup>. So, closely monitoring of the volume of amniotic fluid during antenatal period is very helpful to find out the risk

of the adverse effects during perinatal period.<sup>8,9</sup>

### Conclusion

Oligohydramnios is one of the most common complications during the pregnancy which can cause maternal mortality and morbidity. But if it is diagnose in early stage and if it is treated properly we can reduce the maternal and fetal complications. My patient has received proper care and her conditions also improved as evidenced by the patient conditions and the treatment is still going on till my last date of care.

**Ethical Clearance:** Taken from institutional ethics committee.

**Source of Funding:** Self.

**Conflict of Interest:** Nil.

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