**Antepartum Transabdominal Amnioinfusion in Management of Idiopathic Oligohydramnios**

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**INTRODUCTION:**

- Oligohydramnios, though less common, can be associated with poor fetal prognosis if left untreated.
- Amnioinfusion can be diagnostic or therapeutic, transabdominal or transcervical and can be done during antepartum or intrapartum period.

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**OBJECTIVE:**

- To evaluate the benefits and complications of antepartum transabdominal amnioinfusion (APTA) in cases of idiopathic oligohydramnios in singleton pregnancies.

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**MATERIALS AND METHODS:**

- This was a retrospective case control study carried from August 2014 to April 2017.
- Antenatal patients with idiopathic oligohydramnios were included in the study.
- Exclusion criteria – Twins, POG more than 34 weeks, patients having history of intake of drugs that can lead to oligohydramnios like NSAIDS, PPROM, fetal aneuploidy or structural malformations and evidence of uteroplacental insufficiency.
- Patients receiving APTA were considered as cases
- Controls were patients with oligohydramnios managed expectantly during same period, matched for maternal age, gestational age, gravid etc.
- Warm, sterile Ringer Lactate was infused through intravenous set under USG guidance with 20G spinal needle into amniotic cavity
- Antibiotics were added to Ringer lactate
- Before starting amnioinfusion, amniotic fluid was sent for fetal karyotype and TORCH PCR in all cases.
- Maternal antibiotics and tocolysis were given during procedure and Inj. Dexamethasone was given after 24 weeks in all cases.
- All patients were delivered at SGPGIMS suggesting uniformity of maternal and neonatal care.

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**RESULTS:**

<table>
<thead>
<tr>
<th>Number of cases</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Amnioinfusions</td>
<td>26</td>
</tr>
<tr>
<td>Obstetric variables</td>
<td></td>
</tr>
<tr>
<td>Maternal age (years)</td>
<td>23 – 36</td>
</tr>
<tr>
<td>Gravida</td>
<td>G1 – G4</td>
</tr>
<tr>
<td>Parity</td>
<td>0 – 2</td>
</tr>
<tr>
<td>POG in weeks</td>
<td>18 – 32.3</td>
</tr>
<tr>
<td>Volume of infusion in ml</td>
<td>126 - 500</td>
</tr>
</tbody>
</table>

**Maternal Outcome**

- Fetal malformations were detected in two and amniotic bands were found in one patient and hence were excluded from analysis.
- Complications : Leaking per vaginum in one patient
- No case of chorioamnionitis, bleeding PV or preterm labor
- HPE of placenta did not reveal any significant information.

**Neonatal outcome**

- APGAR scores were comparable in both the groups
- One neonate in APTA group and four neonates in expectant group required NICU admission
- There was no neonatal mortality

**CONCLUSION:**

- APTA is a safe and effective procedure.
- Pregnancy was prolonged more after therapeutic amnioinfusion.
- It reduced the incidence of operative delivery.
- It also reduced NICU admission rate.
- The procedure was associated with 4% chance of leaking per vaginum.

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**References:**

3. NICE Guidelines - Therapeutic amnioinfusion for oligohydramnios during pregnancy (excluding labour). Interventional procedures guidance [IPG192] Published date: November 2006