

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.

OBJECTIVE:

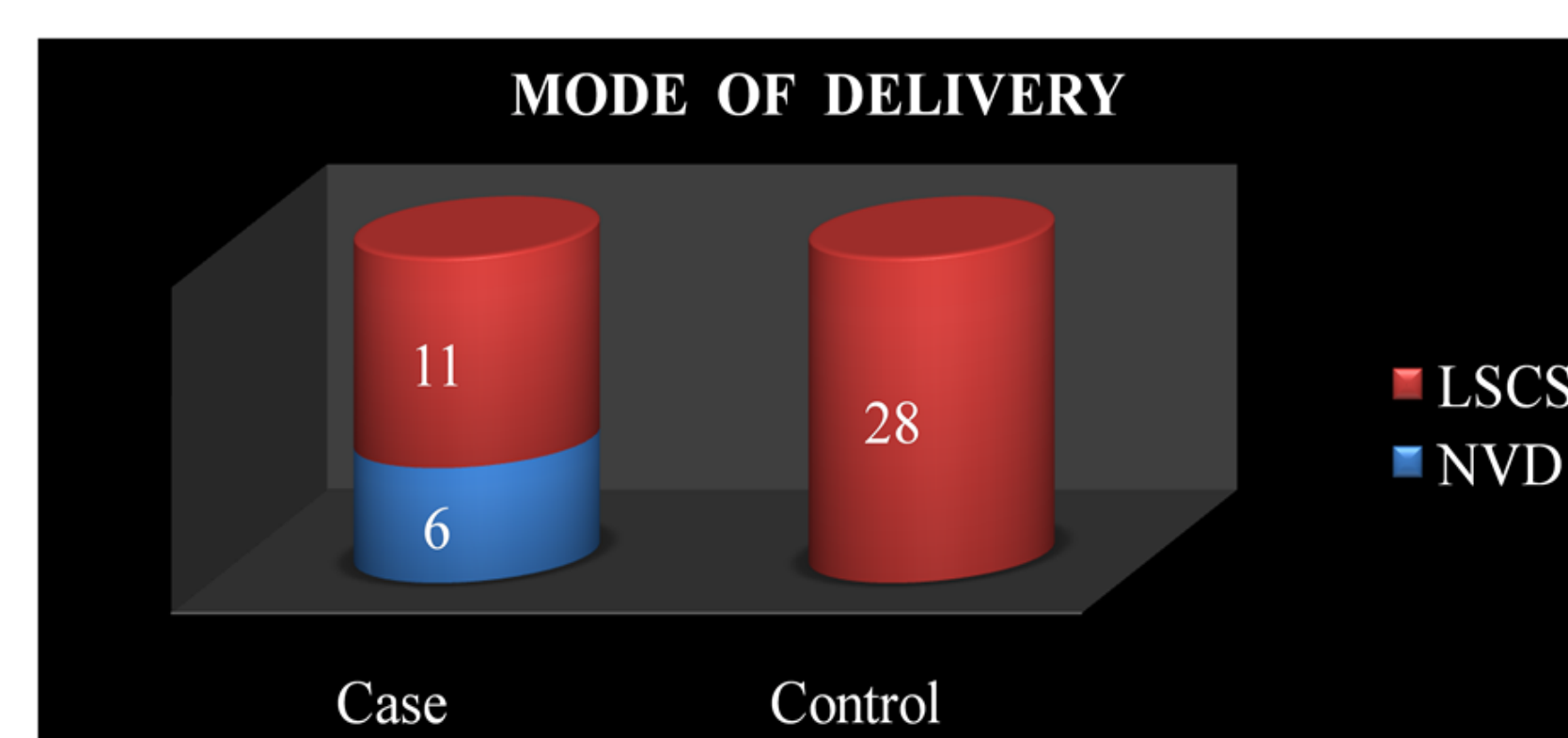
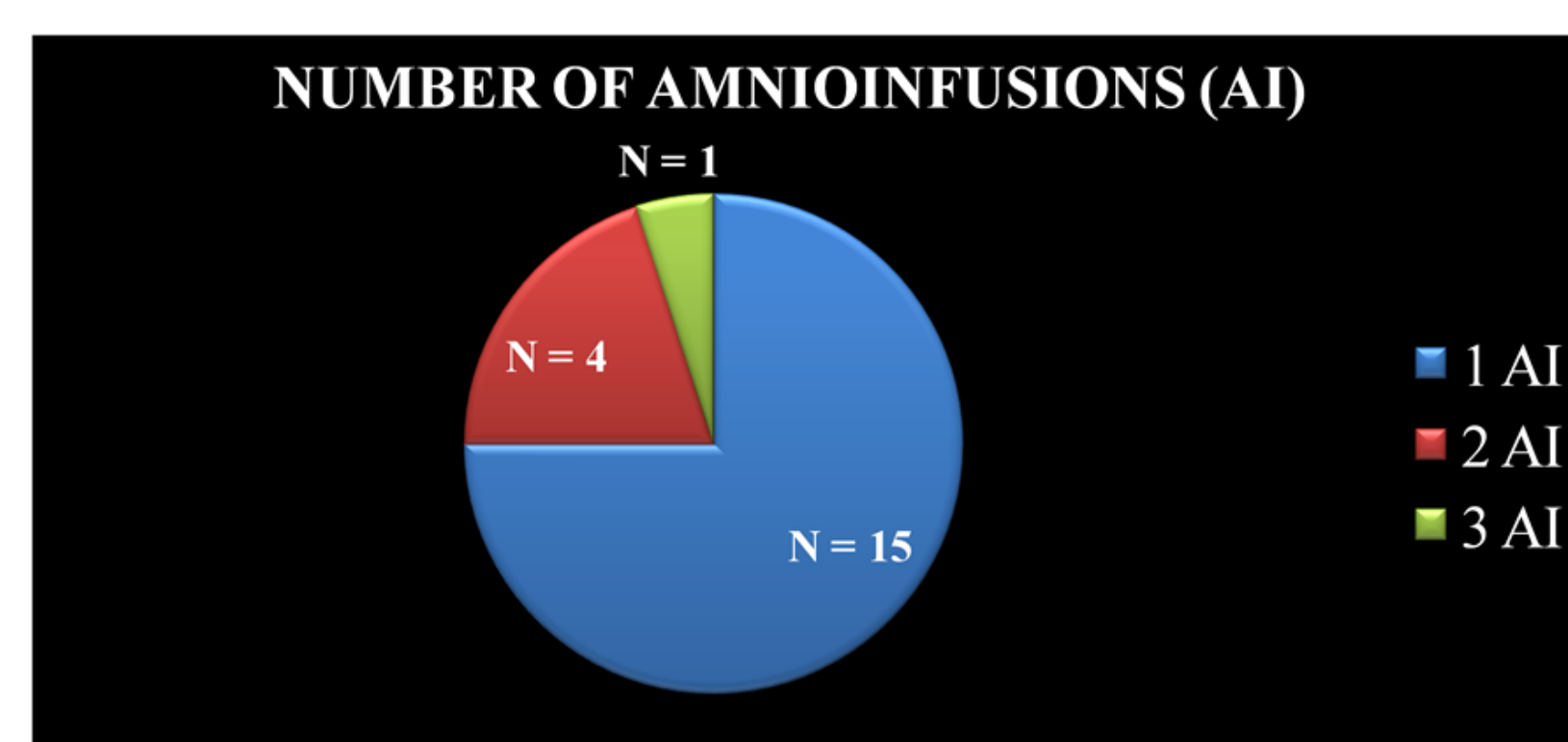
- ❖ To evaluate the benefits and complications of antepartum transabdominal amnioinfusion (APTA) in cases of idiopathic oligohydramnios in singleton pregnancies.

MATERIALS AND METHODS:

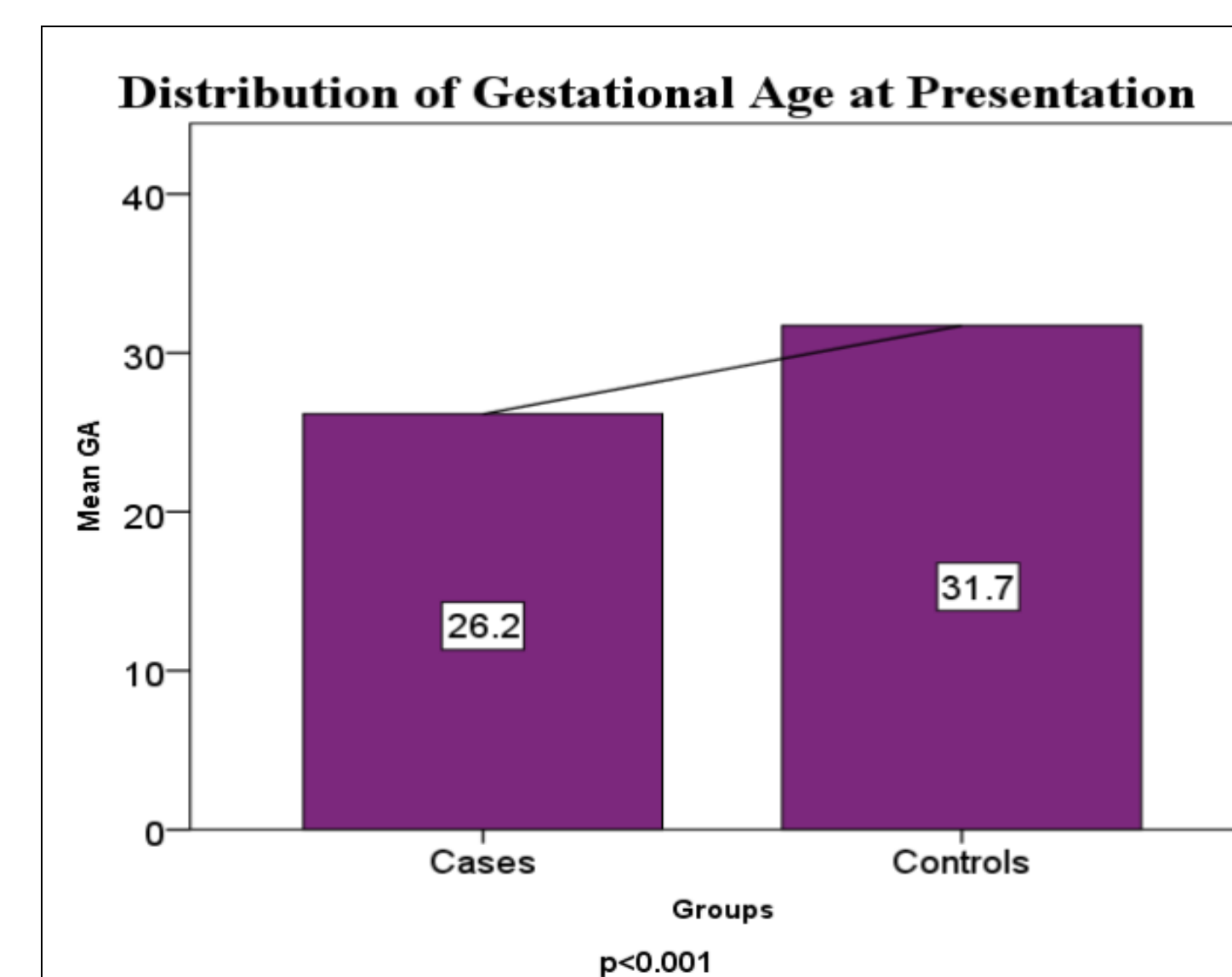
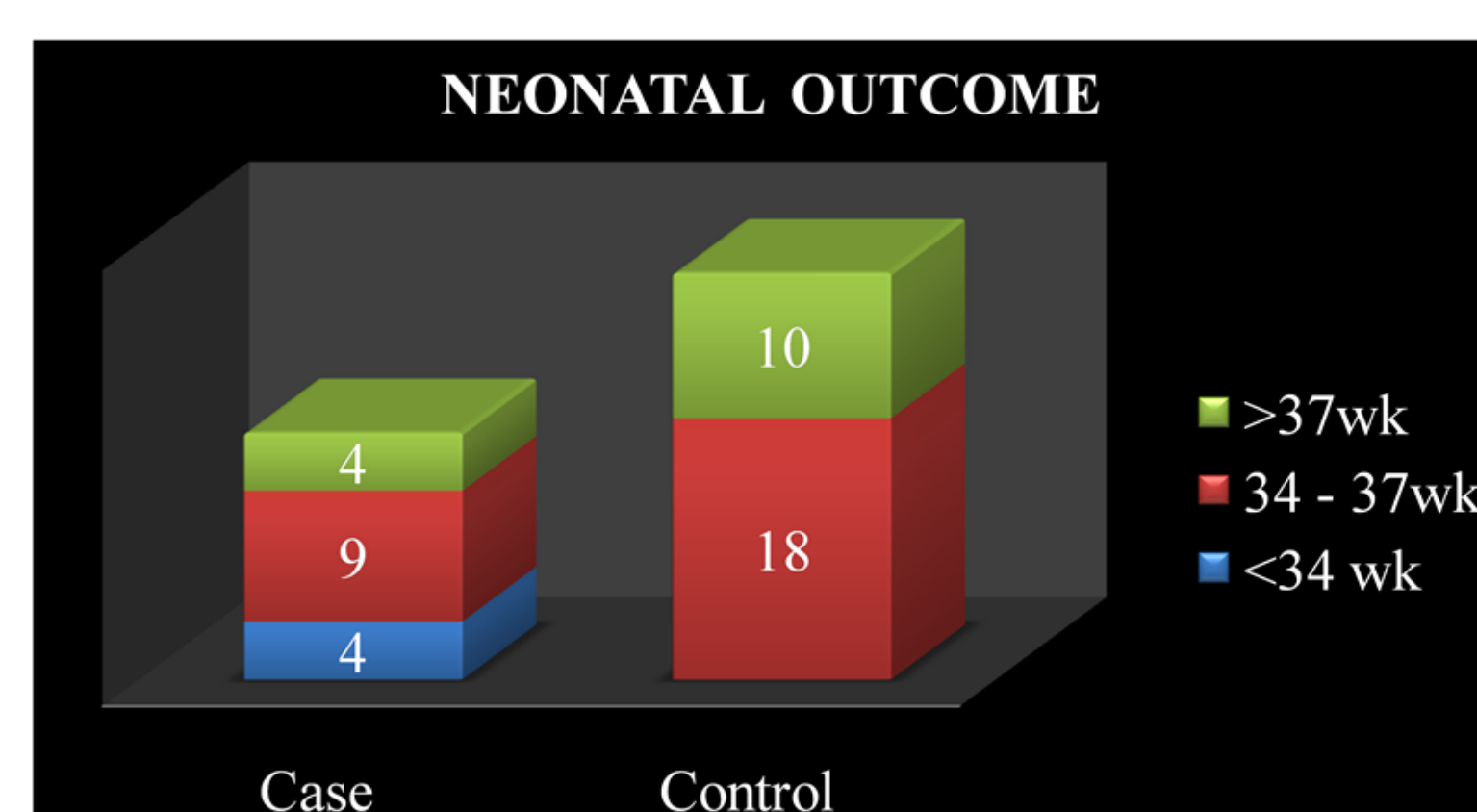
- ❖ This was a retrospective case control study carried from August 2014 to April 2017.
- ❖ Antenatal patients with idiopathic oligohydramnios were included in the study.
- ❖ Exclusion criteria – Twins, POG more than 34weeks, patients having history of intake of drugs that can lead to oligohydramnios 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 24weeks in all cases.
- ❖ All patients were delivered at SGPGIMS suggesting uniformity of maternal and neonatal care.

RESULTS:

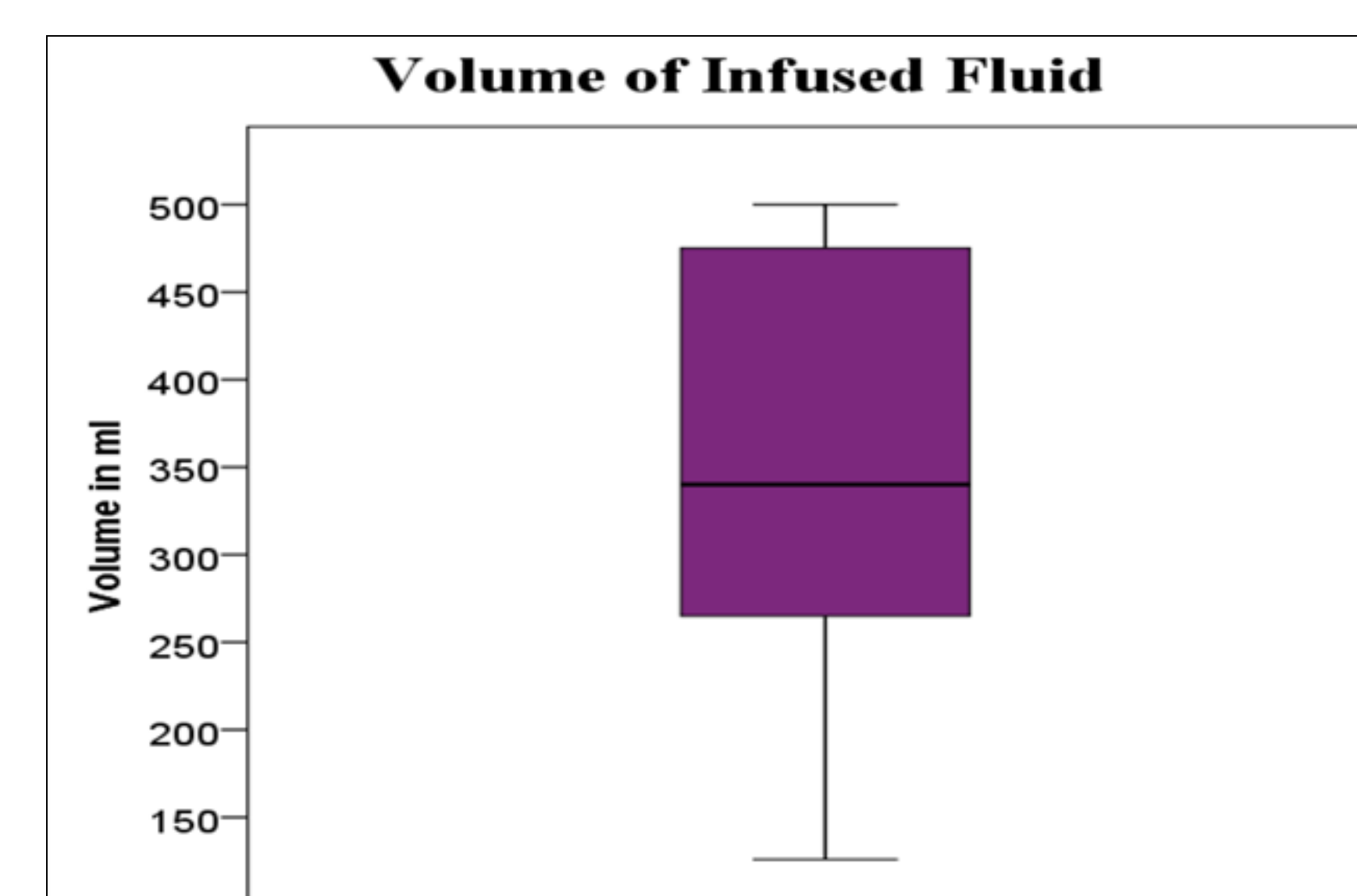
Number of cases		20
Number of Amnioinfusions		26
Obstetric variables	Maternal age (years)	23 – 36
	Gravida	G1 – G4
	Parity	0 - 2
	POG in weeks	18 – 32.3
Volume of infusion in ml		126 - 500



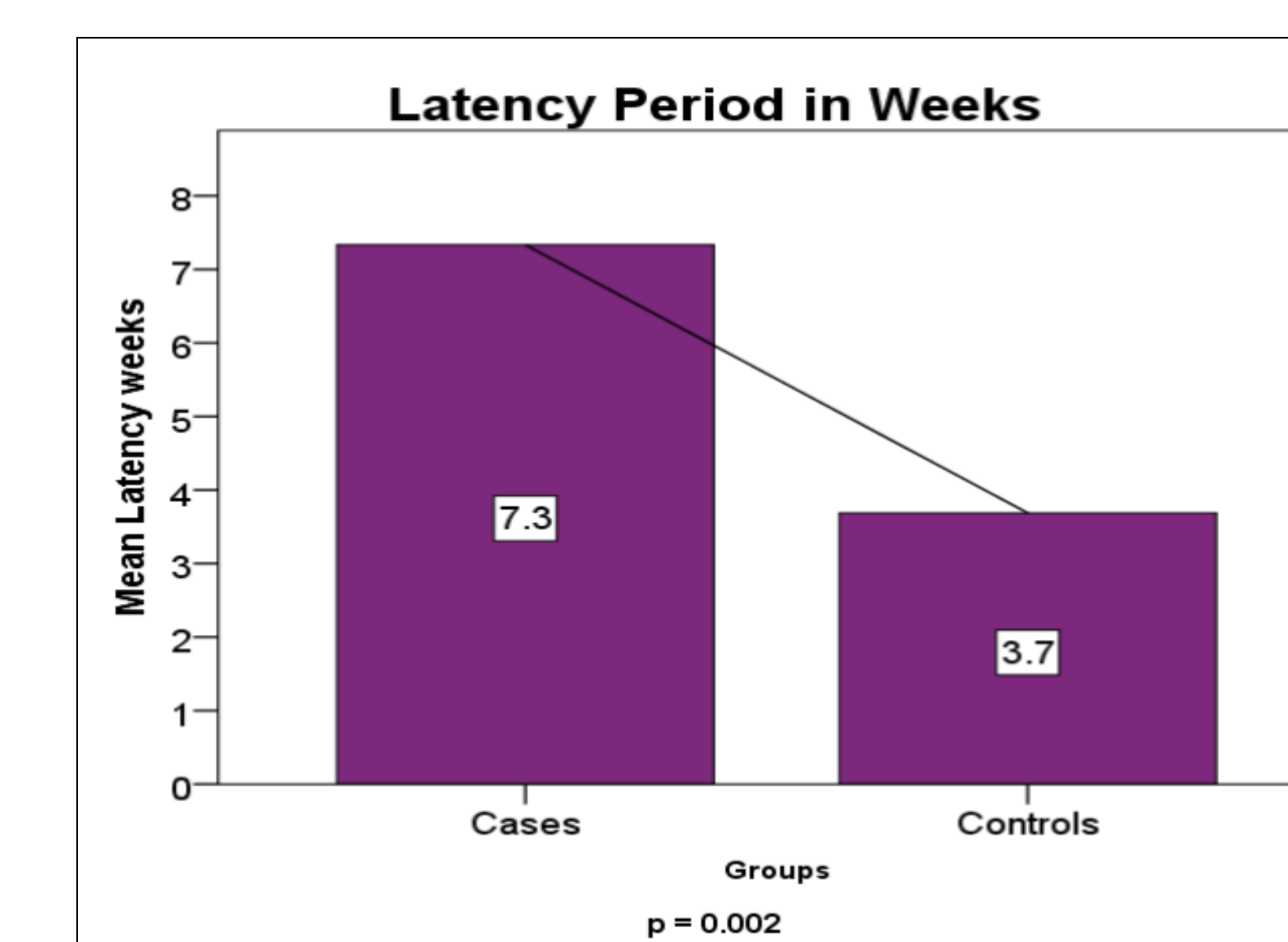
1/3rd of patients in APTA group delivered vaginally



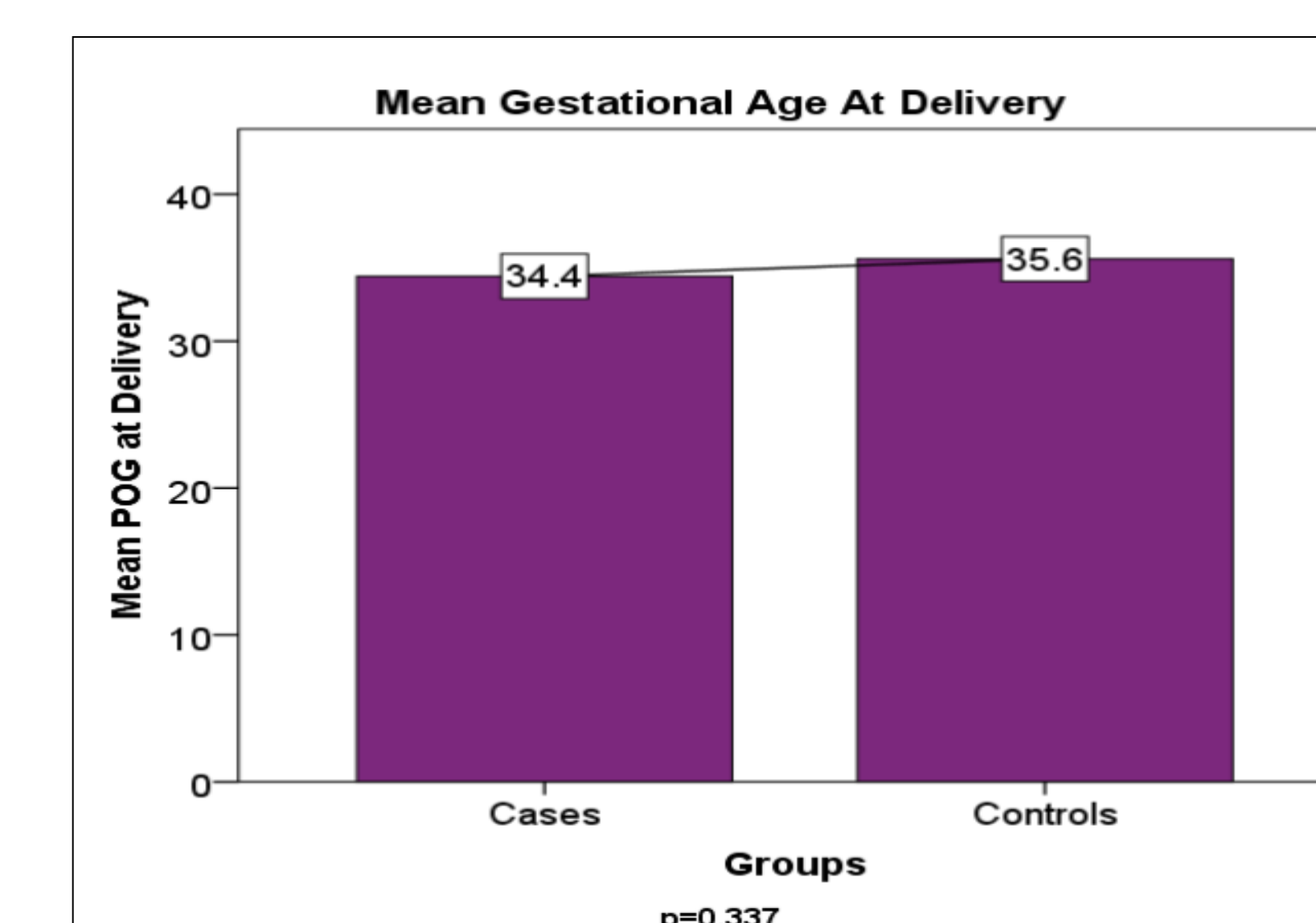
Gestational age at presentation in cases was significantly earlier



Volume of infusion: 5th - 50th centile for corresponding POG and/or target DVP of 4cm



Pregnancy was prolonged more after therapeutic amnioinfusion



Mean gestational age at delivery was comparable in both groups

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 vaginam 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 amnioinfusion.
- ❖ It reduced the incidence of operative delivery.
- ❖ It also reduced NICU admission rate.
- ❖ The procedure was associated with 4% chance of leaking per vaginam.

References :

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2. The experience of amnioinfusion for oligohydramnios during the early second trimester. Hsu TL et al. Taiwan J Obstet Gynecol. 2007 Dec;46(4):395-8
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