

Introduction

- The prevailing obstetric intervention is induction of Labor (IOL) which when done electively has added benefit of combined decision making with the women and is simpler to plan ahead for delivery and prepare for any potential negative outcomes.
- Recent research has demonstrated that elective inductions at 39 weeks of pregnancy result in superior perinatal outcomes and lesser number of caesarean deliveries¹.

Objectives

- Primary aim was to evaluate caesarean delivery rates
- Secondary aim was to evaluate the adverse perinatal outcomes

Methods

- Our study was a randomized control trial done in a tertiary care center, All India Institute of Medical Sciences, Bhubaneswar, in the years 2021-2022.
- After considering the inclusion and exclusion criteria, 156 low risk antenatal women were included and randomised, with 78 of them being placed in the elective induction group and the other 78 women in the expectant management group.

Results

- Cesarean delivery rates were the primary outcome of our study which showed rates 41% vs. 51.3% (RR 0.8% p-value 0.199) in elective induction group against expectant management which is 8% drop in caesarean delivery rates is elective induction group.
- This was consistent with the ARRIVE trial(A Randomized Trial of Induction Versus Expectant Management) which showed 16% reduction rates in cesarean sections².
- In terms of perinatal outcomes, rates of meconium stained liquor was statistically significant (10.3% vs 23.1%) with a p-value of 0.032 when elective IOL group was compared with expectant management. Other adverse outcomes did not differ significantly.

Discussion

- Induction of labor with efficient and feasible methods when done increases the maternal satisfaction and improve perinatal outcomes and lower the number of caesarean deliveries.
- Research shows that women who were electively induced see a decrease in overall caesarean delivery rates. However, there is currently scant literature about the timing of induction.
- Hence a protocol for the method and timing of labor induction must be developed, and this will require more research involving several centers.

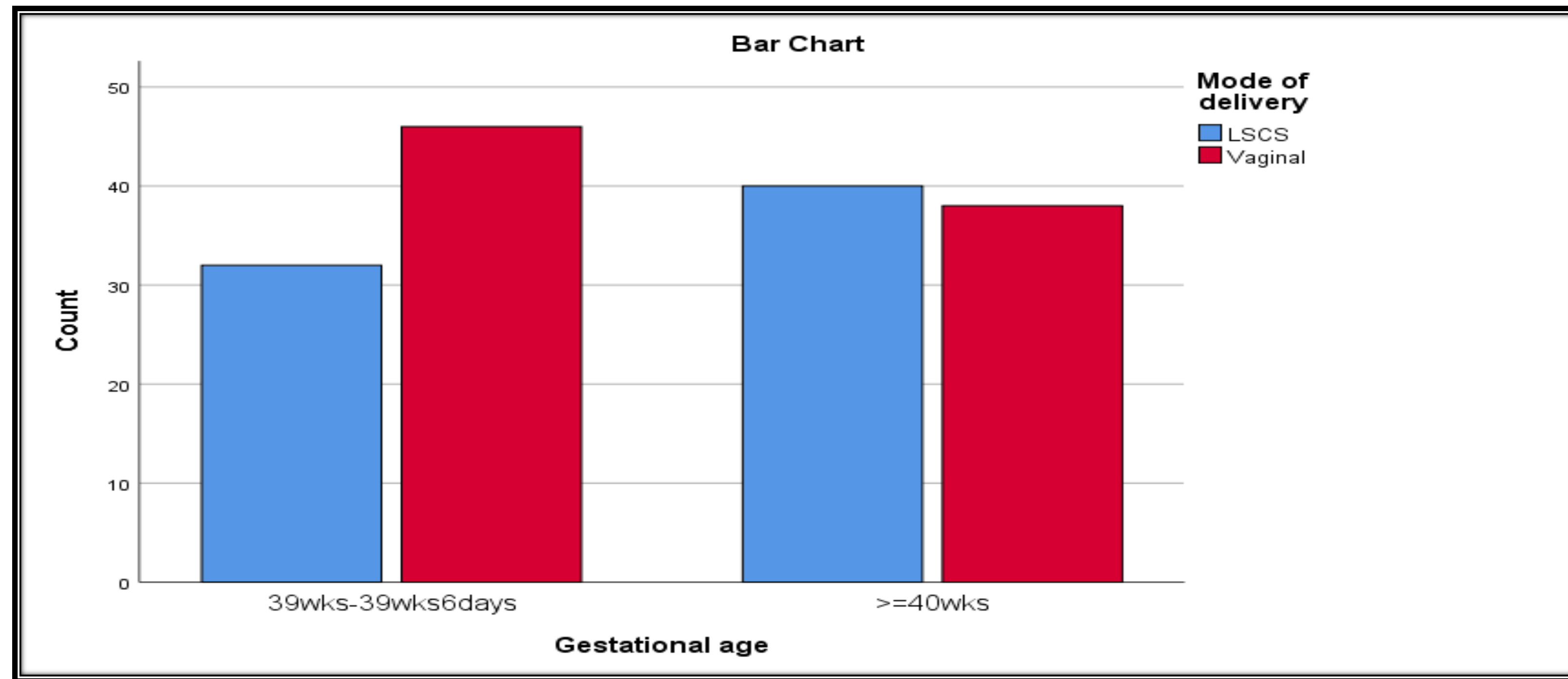


Figure 1

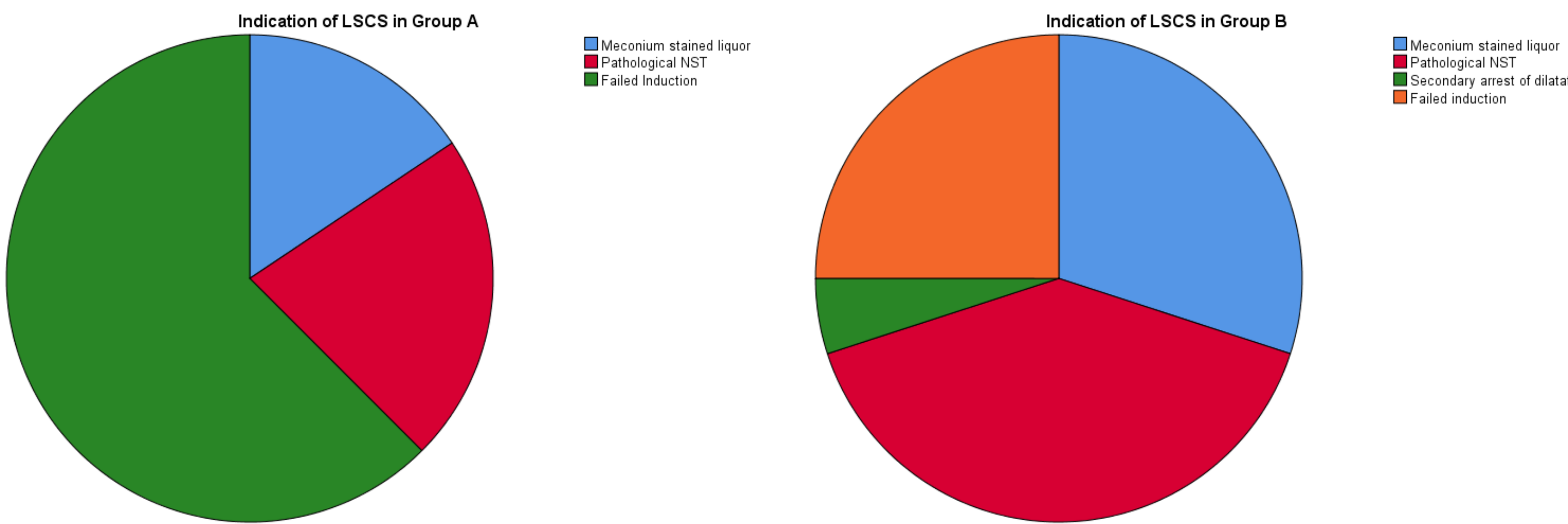


Figure 2

Figure 3

Figure 1: Bar diagram showing rates of caesarean delivery in group A versus group B

Figure 2: Pie chart showing the indications of caesarean delivery in group A

Figure 3: Pie chart showing the indications of caesarean delivery in group B

References

- Little SE. Elective Induction of Labor: What is the Impact? Obstet Gynecol Clin North Am. 2017 Dec;44(4):601–14.
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