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Introduction

Caesarean section (CS) is the most commonly performed major surgical procedure in obstetrics, with global rates increasing from approximately 12% in 2000 to over 21% in recent years.

Simultaneously, the rate of vaginal birth after caesarean (VBAC) has decreased by 63% since 1996. While CS can be life-saving, multiple procedures are associated with heightened maternal risks, including uterine rupture, placenta previa, adhesions, thromboembolic events, and postoperative infections.

This study aims to assess the predictive reliability of scar tenderness in evaluating scar integrity during emergency caesarean sections.

Objective

- Evaluation of uterine scar conditions in patients undergoing lower segment cesarean section (LSCS).
- Correlation of scar characteristics with feto-maternal outcomes.
- Development of evidence-based criteria for risk stratification and clinical decision-making.

Methods

- This study was conducted prospectively over 12 months. Scar tenderness was assessed through digital pressure techniques combined with patient-reported feedback during clinical evaluation.

- Data collection included intraoperative observations of scar integrity, maternal hemodynamic parameters, vaginal bleeding, and fetal heart rate monitoring.

- All clinical information was extracted from the hospital’s electronic medical record system.

- Descriptive statistics and relevant inferential analyses were applied using SPSS to evaluate the collected data.

Results

A total of 1,108 emergency caesarean sections were performed between January and December 2020. Among these, 65 patients underwent surgery due to scar-related concerns. The age of patients ranged from 20 to 45 years, with the highest prevalence observed in the 31–40-year age group (38%).

Regarding antenatal care status, 43% of patients were booked cases, while 22% were unbooked.

Scar Tenderness Assessment:

- 50.8%) patients had intact uterine scars.
- 27.7% had thinned scars.
- 21.5% experienced scar dehiscence.
- No uterine rupture cases recorded.

Maternal Complications

- Blood transfusion required in 7 patients.
- Endometritis developed in 3 patients.
- Urinary tract injuries in 2 patients.

Fetal Outcomes

- No neonatal deaths reported.
- No apgar scores below 7 at 5 minutes.
- No neonatal NICU admissions.

Fig 1 : Demographic data

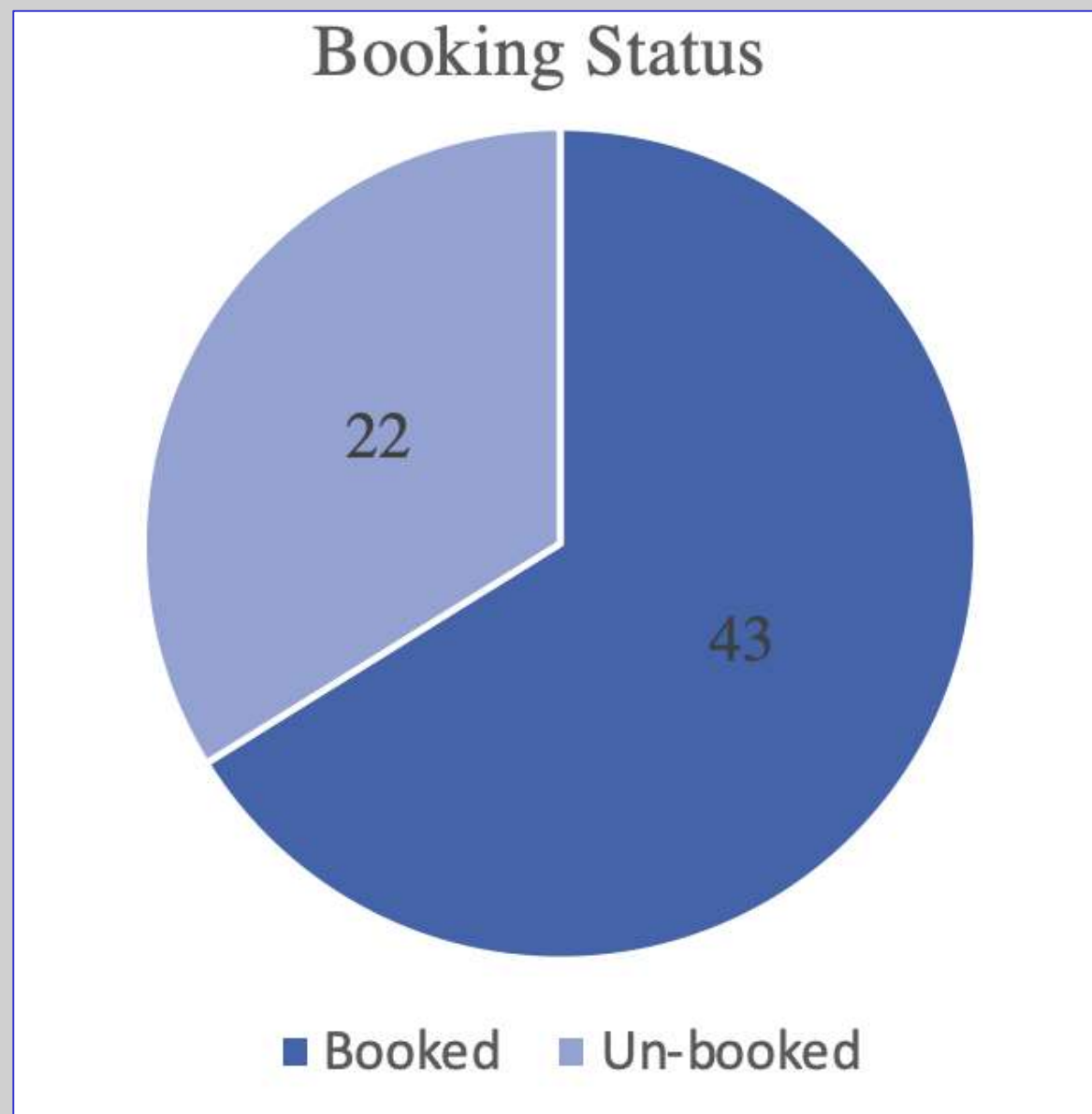
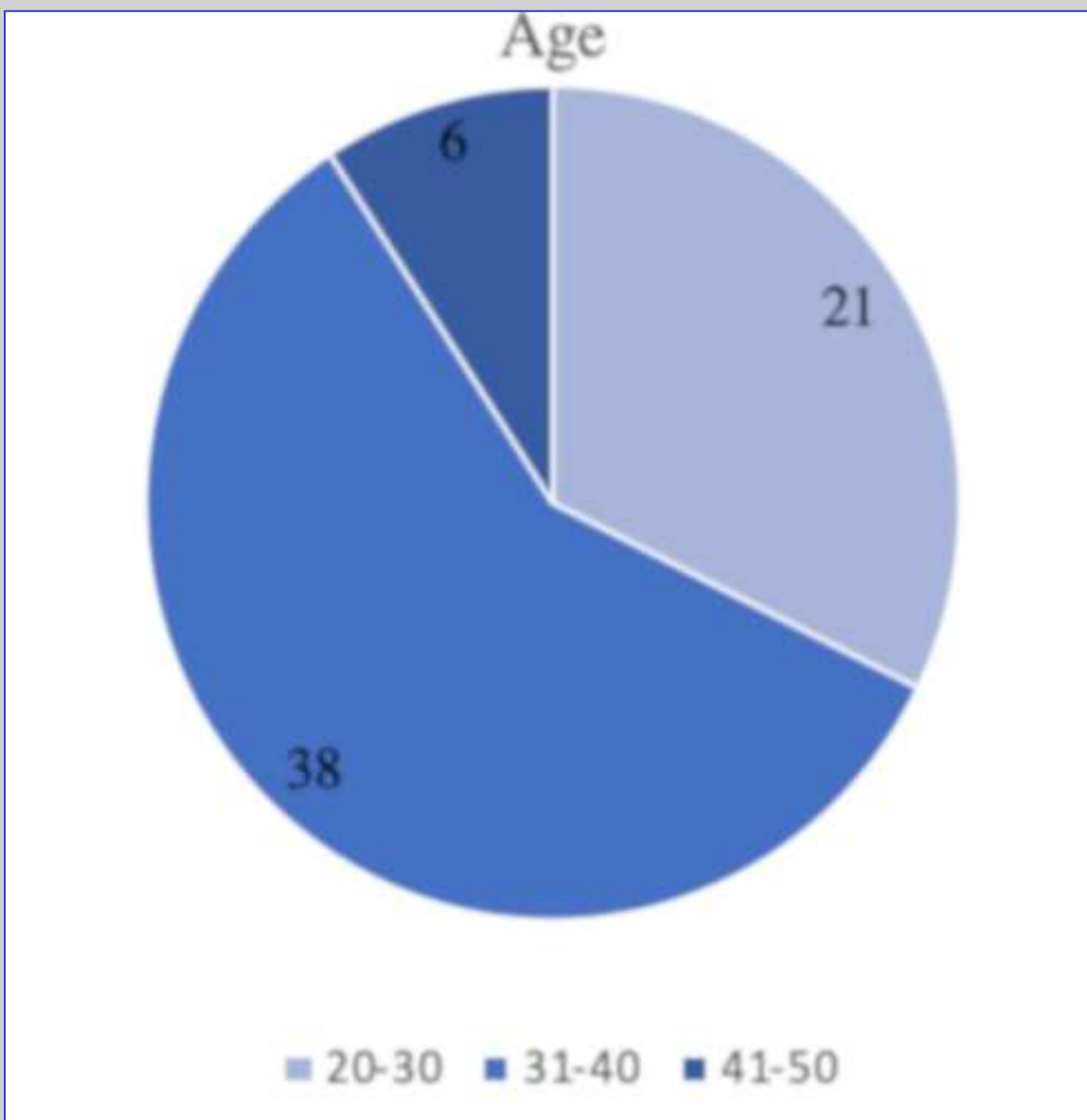


Table 1: Intra-operative scar condition

Scar Condition	Number Of Patients
Rupture	0
Dehiscence	14
Thinned out	18
Intact	33

Table 2: Fetal outcome

Fetal Outcome	Number Of Patients
Neonatal death	0
Apgar < 7 at 5 min	2
NICU admission	9
Meconium stained liquor	19

Conclusions

Previous caesarean deliveries are associated with increased maternal morbidity, emphasizing the importance of reducing primary caesarean rates to lower future risks. Routine assessment of scar tenderness may aid in identifying patients at risk, and institutional delivery is strongly recommended for women with a history of caesarean section.

References

