

Pregnancy Outcomes Following Fetal Reduction in Dichorionic Triamniotic Triplets: A Six-Year Single-Center Study in India

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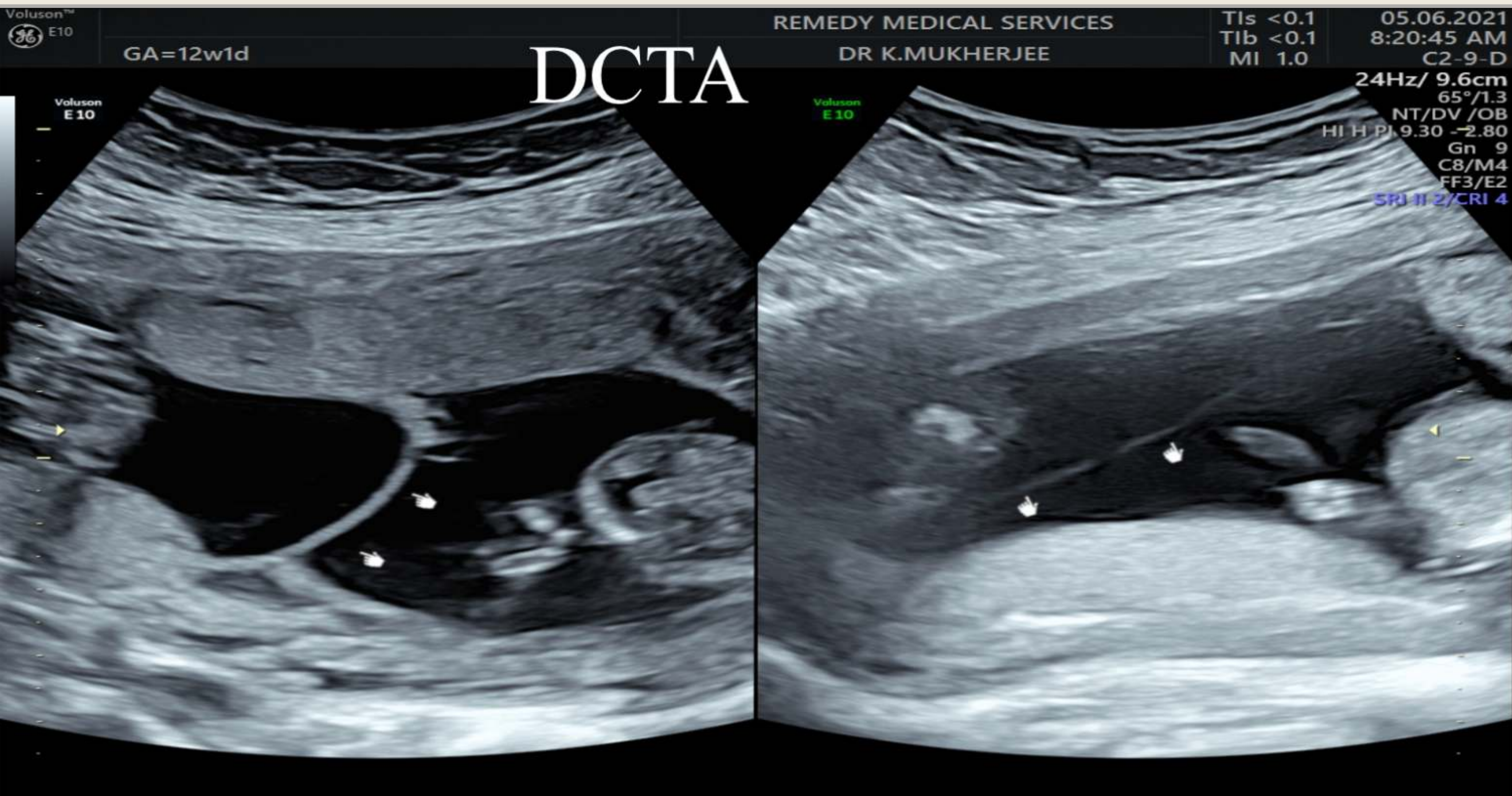


Image courtesy: Dr. K Mukherjee

01. Objective

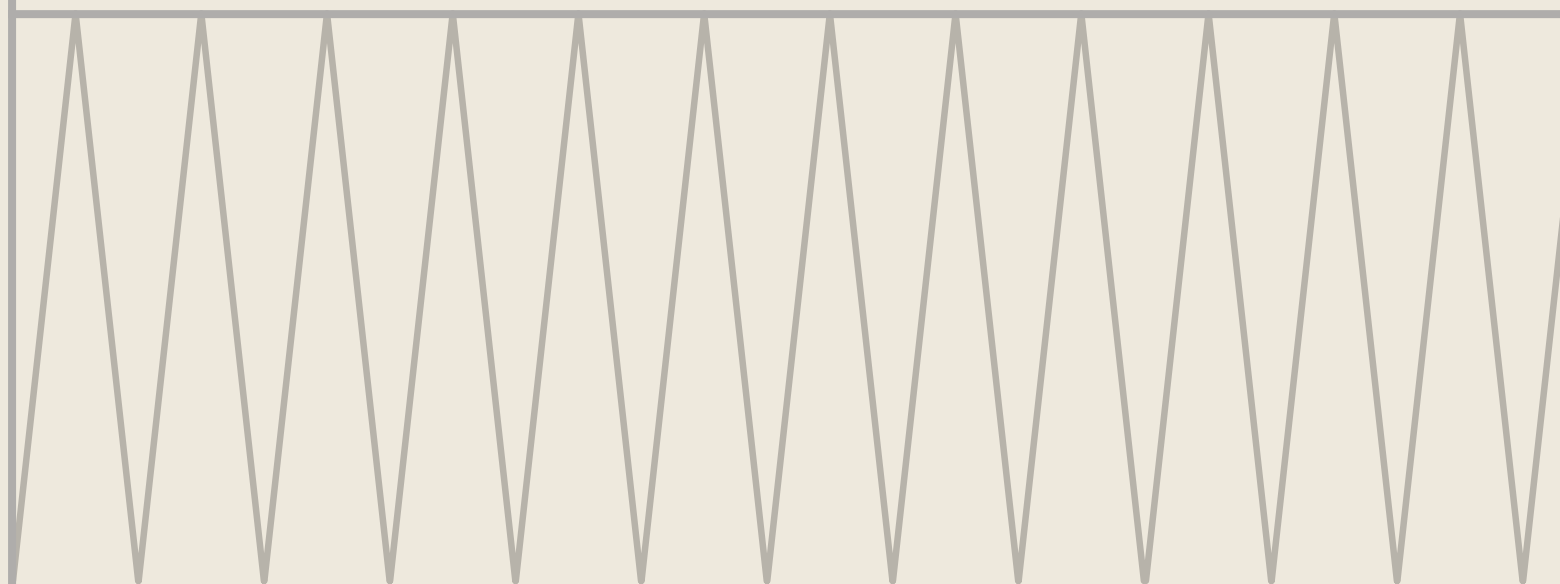
Our center provides comprehensive counseling to all Dichorionic Triamniotic Triplets (DCTA) cases in early pregnancy, offering options for fetal reduction (FR) to either a singleton or twins, or to continue with triplets without intervention. The majority choose to reduce the monochorionic pair and proceed with a singleton after thorough discussion. This study aims to assess the outcomes of these pregnancies, focusing on the risk of pregnancy loss and perinatal outcome.

WHY MFPR?

Multi-fetal pregnancy reduction by selective termination has been advocated in an attempt to reduce the risk of adverse obstetric and perinatal outcomes.¹ With MFPR, 75% triplets deliver less than 35 weeks.² It also reduces risks of prematurity & maternal complications.³

References

1. James D, Steer PJ, Weiner CP, Gonik B. High Risk Pregnancy: Management Options. 4th ed. Missouri: Saunders/ Elsevier; 2011.
2. NICE Guidelines 137. Twin and triplet pregnancy. 2019
3. Embryo reduction versus expectant management in triplet pregnancies. J Maternal Fetal Neonatal Med. 2004

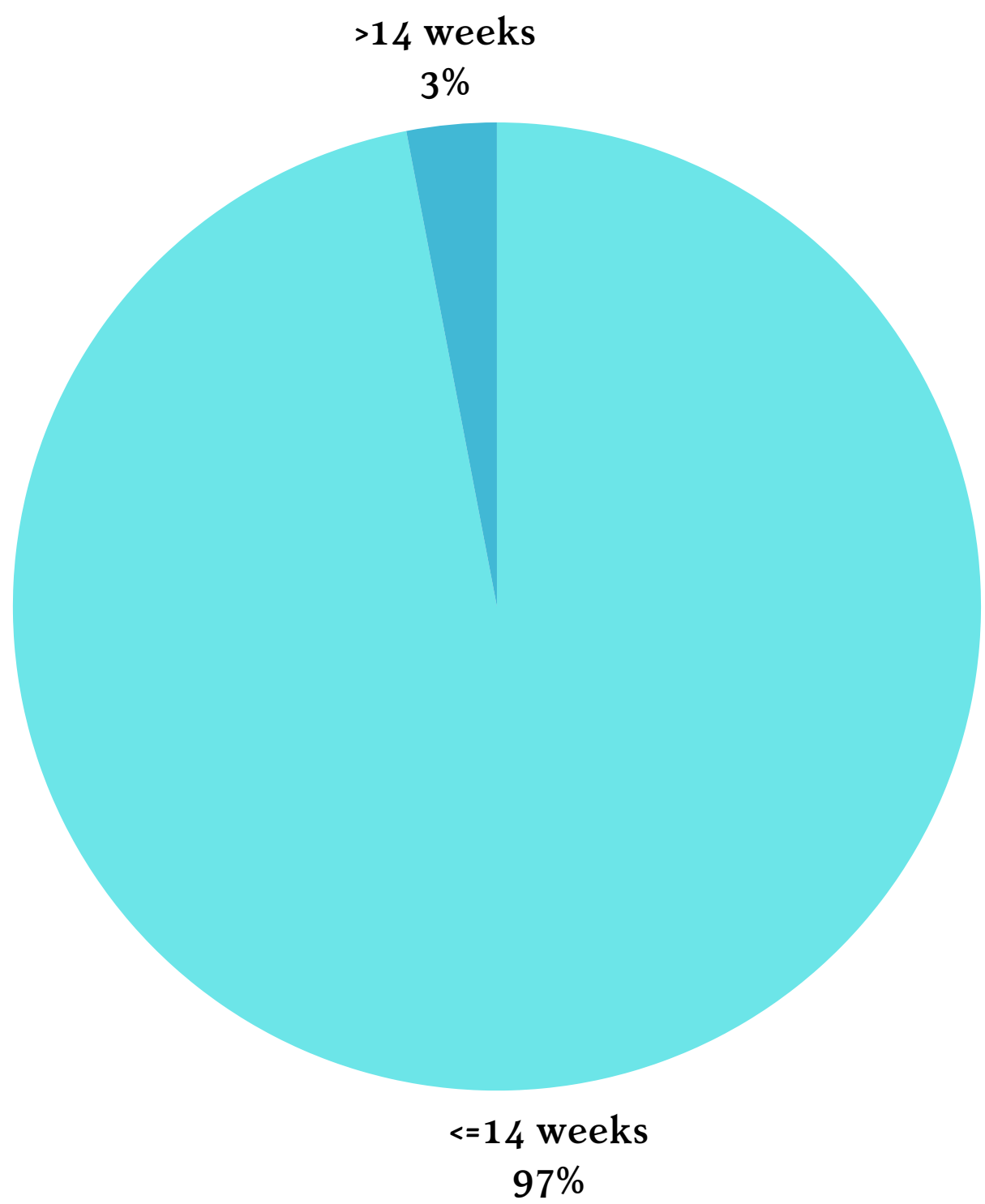


02. Methodology

This retrospective review examined 35 cases of intrathoracic KCL administration into one of the monochorionic pairs at 11-13 weeks gestation, resulting in auto-reduction of its co-twin in all but one case. Main outcome measures included miscarriage < 24 weeks, preterm delivery < 37 weeks, birth weight, and Intrauterine Fetal Death (IUFD). Data were collected from the clinic database and through telephonic interviews post-delivery.

03. Analysis

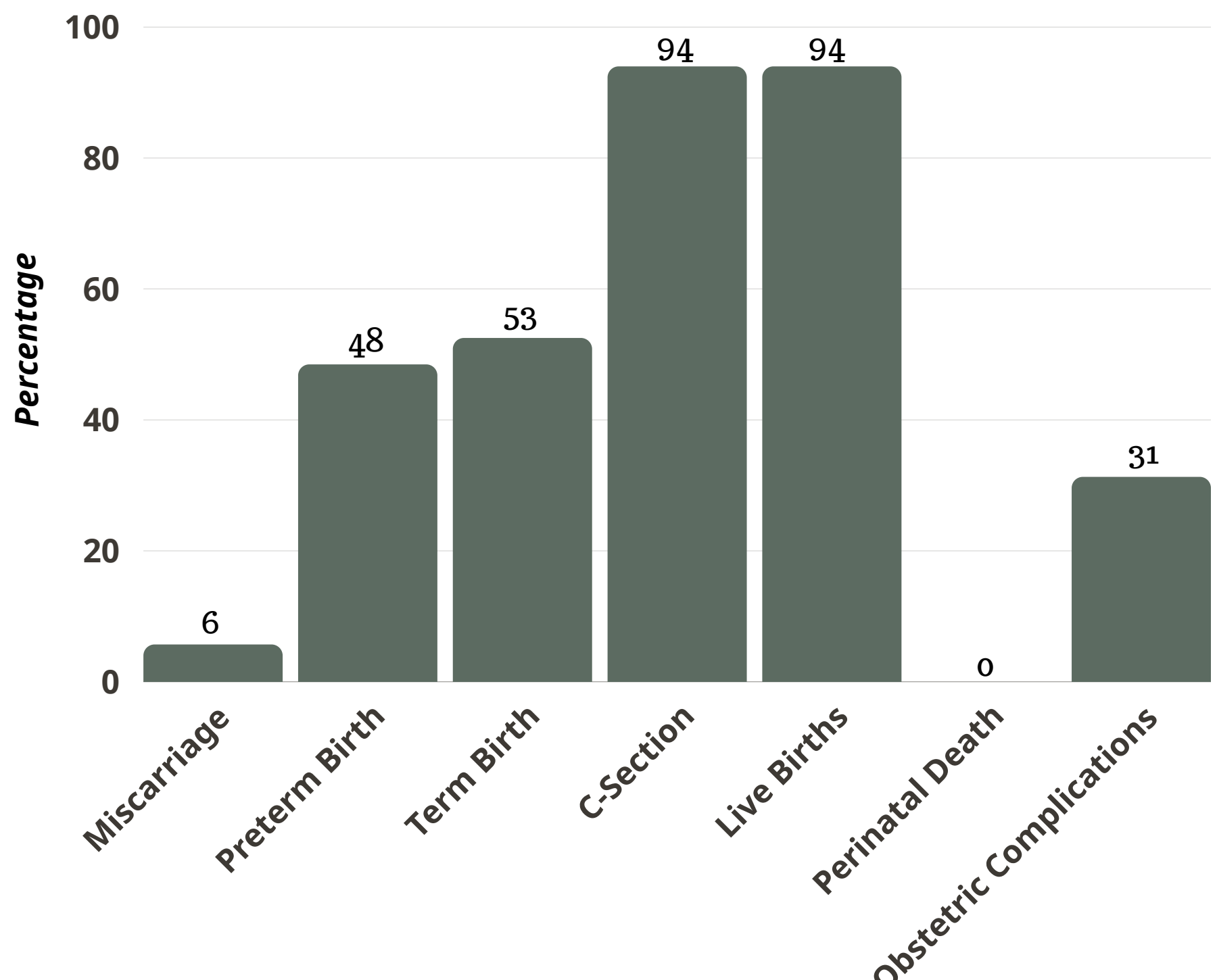
The pie chart shows gestation values categorized into two ranges: less than or equal to 14 weeks, and above 14 weeks. 97% are ≤14 weeks, with the other 3% exceeding 14 weeks. Additionally, there's a bar graph illustrating various outcomes.



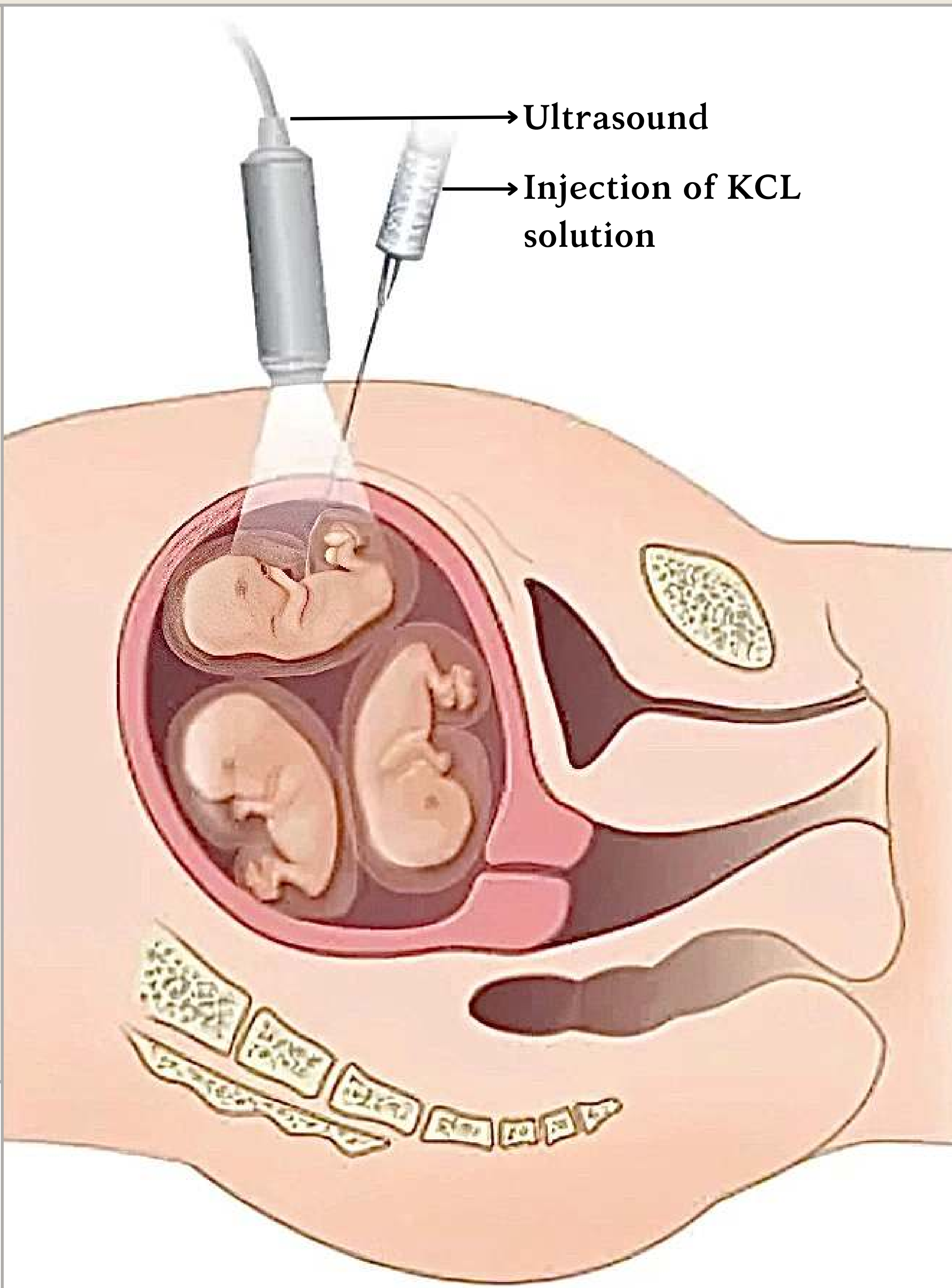
Distribution of period of gestation at reduction

04. Results/Findings

Out of 38 DCTA pregnancies referred during the six-year study period, all but two underwent fetal reduction to a singleton pregnancy using the KCL method. In the remaining two cases, LASER reduction to twins was performed. One case was excluded due to the discovery of an acardiac twin in one of the monochorionic pairs. Among the 35 reductions, two resulted in miscarriage within a week, while another experienced premature delivery at 31 weeks. The remaining pregnancies reached late preterm or term, with deliveries occurring after 34 weeks. The mean gestational age at delivery was 260±8 days (mean ± SD) for the mothers, and the mean birth weight of the neonates was 2531±329.2 gm. Birth weight was <1500 gm for 0%, between 1500 and ≤2500 gm for 42.8%, and >2500 gm for 54.2%. There were no instances of IUFD or neonatal death in this series.



Bar graph illustrating various outcomes



Schematic diagram illustrating MFPR

05. Conclusion

Our study highlights the safety and efficacy of fetal reduction to singleton using the KCL method in managing DCTA Triplets. These findings underscore the importance of timely intervention supported by local data, to foster positive outcomes for such patients.