



## Case Report

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# Management of Shoulder Dystocia in a Term Pregnancy: A Case Report

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**Received Date:** March 17, 2025**Published Date:** March 24, 2025

## Abstract

Shoulder dystocia is an obstetric emergency that requires immediate and strategic intervention to prevent fetal and maternal morbidity. We report a case of a 32-year-old primigravida at 39 weeks of gestation who presented with prolonged second stage of labor and subsequent shoulder dystocia. The McRoberts maneuver, suprapubic pressure, and delivery of the posterior arm, were sequentially performed, resulting in successful delivery with minimal complications. This case highlights the importance of a structured approach and the need for multidisciplinary team preparedness in managing shoulder dystocia. The discussion integrates recent literature and guidelines to provide an updated approach to management.

**Keywords:** Shoulder Dystocia; Obstetric Emergency; Mcroberts Maneuver; Fetal Macrosomia; Maternal-Fetal Outcome; Multidisciplinary Approach

## Introduction

Shoulder dystocia is a rare but serious obstetric complication characterized by failure of the fetal shoulders to deliver spontaneously after the head has emerged [1]. The incidence ranges from 0.2% to 3% of vaginal deliveries and is associated with significant neonatal morbidity, including brachial plexus injury and hypoxic-ischemic encephalopathy [2]. Maternal complications, such as postpartum hemorrhage and perineal trauma, are also of concern (American College of Obstetricians and Gynecologists [ACOG], 2017) [3]. Early recognition and prompt intervention are crucial to minimizing these risks.

## Case Presentation

A 32-year-old primigravida at 39 weeks of gestation was

admitted to our labor ward with regular contractions. Her antenatal period was uneventful except for a suspicion of fetal macrosomia based on ultrasound estimates (fetal weight 4,200 g). Labor progressed spontaneously, and she reached full cervical dilation within 10 hours. However, during the second stage of labor, the fetal head delivered but retracted against the perineum (turtle sign), indicating shoulder dystocia. Immediate management involved initiating the McRoberts maneuver, which involves hyperflexion of the maternal thighs onto the abdomen, a technique that has shown a success rate of approximately 42% in resolving shoulder dystocia [4]. When this alone did not resolve the dystocia, suprapubic pressure was applied, which has been demonstrated to further increase the likelihood of resolution [5]. Since these maneuvers failed, the posterior arm was delivered, ultimately

facilitating successful fetal expulsion. This sequence aligns with current management protocols and best practices in shoulder dystocia resolution, as reinforced by recent guidelines (ACOG, 2017) [3]. The newborn male weighed 4,300 g, with Apgar scores of 7 and 9 at 1 and 5 minutes, respectively. Despite the risk of brachial plexus injury associated with shoulder dystocia, the newborn showed no neurological deficits, which is a common complication in macrosomic infants experiencing shoulder dystocia [6]. The mother sustained a second-degree perineal laceration, which was repaired without complications.

## Discussion

This case underscores the importance of a stepwise approach in managing shoulder dystocia. The McRoberts maneuver is widely accepted as the first-line intervention, with studies indicating its success in nearly half of all cases [2]. Suprapubic pressure serves as an adjunct maneuver, exerting lateral pressure to dislodge the impacted anterior shoulder (ACOG, 2017) [3]. In cases where these approaches fail, delivering the posterior arm can significantly reduce fetal shoulder diameter and facilitate delivery [1].

Risk factors for shoulder dystocia include fetal macrosomia, maternal diabetes, prolonged labor, and maternal obesity [4]. A review of recent literature, including the attached study, highlights the increasing role of simulation-based training in improving clinician response to shoulder dystocia scenarios. Evidence suggests that hospitals with routine simulation training see lower rates of neonatal morbidity related to dystocia [6]. Furthermore, an emphasis on recognizing risk factors, such as fetal macrosomia and prolonged second stage of labor, is crucial in decision-making regarding mode of delivery [4].

Our case highlights the importance of structured team training and simulation-based preparedness in shoulder dystocia management. Studies have shown that multidisciplinary simulation training significantly improves response time and neonatal outcomes in such emergencies [6]. Alternative maneuvers, such as the Rubin II and Woods' screw maneuvers, should also be considered when initial interventions fail. The documentation and communication of dystocia events are essential for quality

improvement in obstetric practice [5].

## Conclusion

Shoulder dystocia remains a critical obstetric emergency requiring a rapid and systematic methodology. This case reinforces the importance of a multidisciplinary approach to managing shoulder dystocia. Ongoing obstetric team training, evidence-based protocol implementation, and early recognition of risk factors are crucial to minimizing maternal and neonatal complications. The insights from literature further emphasize that integrating predictive models, structured training, and standardized management protocols, significantly improves obstetric outcomes.

## Acknowledgements

We acknowledge the labor and delivery team for their prompt response and expertise in managing this case.

## Conflict of Interest

No conflict of interest.

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