THE EXIT PROCEDURE; A MULTIDISCIPLINARY APPROACH

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ABSTRACT BODY:

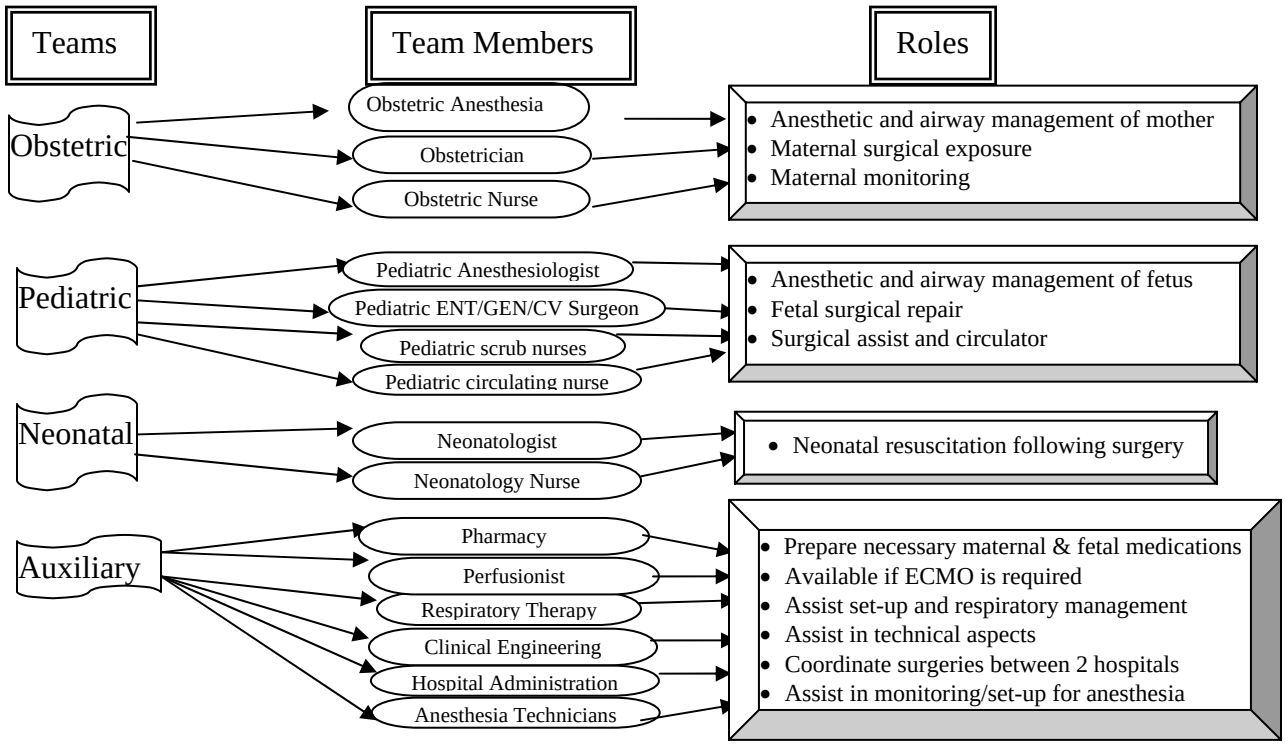
Introduction

The Ex Utero Intrapartum Treatment (EXIT) procedure, developed to reverse tracheal occlusion in fetuses with congenital diaphragmatic hernias, has now been used to correct many potentially life threatening fetal conditions.[1] The EXIT procedure utilizes utero-placental bypass to achieve gas exchange during fetal surgery. The complex nature and multiple specialty involvement inherent in this surgery present a variety of surgical and organizational challenges. As such, a well-organized multidisciplinary approach is critical to successful completion of any EXIT procedure. This is a description of our experience at the Medical College of Wisconsin.

Methods

After obtaining Institutional Review Board (IRB) approval to perform fetal surgery, a complete system analysis was performed to 1) identify the necessary components of a multidisciplinary team and 2) to specifically delineate the roles of each team member. Pre-procedural meetings addressed and evaluate potential barriers to the provision of optimal care. Team members were assigned specific responsibilities and a detailed treatment algorithm was constructed. On the day prior to surgery, a walk-through session was performed to minimize system errors.

Results The multidisciplinary team identified consisted of physicians (pediatric surgeons, obstetricians, anesthesiologists and neonatologists), nurses (obstetrical, neonatal and surgical), surgical technicians, anesthesia technicians, and hospital administrators.



Discussion

Successful completion of an EXIT procedure requires collaboration from individuals of multiple medical and nonmedical specialties. Errors during the performance of an EXIT procedure may produce devastating effects on the mother or fetus. A well-planned and well-organized multidisciplinary approach should be utilized to maximize efficiency and minimize complications. Individual roles should be defined and rehearsed prior to the initiation of the procedure.

Refs:

1. Bouchard S. et al., Journal of Pediatric Surgery, 2002