Tinkering in the womb: fetal surgery

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Introduction

Prenatal surgery is an invasive procedure performed on a fetus. Using highly sophisticated surgical procedures, specialists are now able to treat certain disabling conditions like heart defects, urinary blockages, bowel obstructions, airway malformations and life-threatening birth defects during fetal development instead of after birth, and to offer new hope to families.

Aim

I based my research on studying different cases of serious children's problems that can't wait to be fixed after birth.

Materials and methods

I studied scientific literature to find out the aspects of prenatal surgery with the help of network sources, analysed its benefits and risks, including ethical issues.

Results

When carrying out my research I tried to reveal the advantages and disadvantages of fetal surgery. Fetal surgery may be used for several conditions: open fetal repair for myelomeningocele (Spina bifida), resection of a chest or neck mass, resection of a sacrococcygeal teratoma, congenital diaphragmatic hernia (CDH). Fetal surgery may be used together with stem cell therapy. By providing therapy in utero, doctors have a better chance of treating a disease before debilitating symptoms appear. Of course the prospects of fetal intervention are impressive. It seems to be a miracle for many families. Many mothers are willing to do whatever is necessary to give birth to a healthy baby. Unfortunately, they forget about the risk. Major abdominal surgery and general anesthesia pose risks to both the mother and the child. Therefore, fetal intervention raises a number of ethical questions that must be considered.

Conclusion

The benefits of prenatal surgery don't come without risks. Clinicians must maintain an individualized approach with each patient. Mothers who have fetal intervention are closely

monitored for preterm labor and receive medications to control it. Still, for many parents and their babies, fetal surgery is a true medical miracle.