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SURROGATE MATERNITY: GESTATIONAL AND PERINATAL COMPLICATIONS

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Infertility is a prevalent issue in modern medicine and should be recognized as a condition that impacts the physical and mental well-being of those affected. Medical advancements enable infertile couples or people to experience family life with children through the assistance of a surrogate. Surrogacy is an assisted reproductive technology method where a surrogate carries and delivers a baby on behalf of an intended parent who cannot conceive naturally due to uterine anomalies, serious medical conditions, or pregnancy contraindications. Surrogacy has gained significant popularity globally, with the number and percentage of embryo transfer cycles using a surrogate increasing from 2841 in 2011 to 9195 in 2019. Traditional surrogacy involves artificially inseminating the surrogate mother with the sperm of the intended father, while gestational surrogacy transfers an embryo to the uterus of a surrogate without any genetic relationship. Surrogacy has sparked numerous ethical and legal debates, and is even illegal in many countries.

The objective of this study is to examine and condense information from scientific journals and papers regarding surrogate maternity, with a specific focus on the gestational and perinatal complications experienced by surrogate mothers.

This is a review of all articles listed in Google Scholar and PubMed about the gestational and perinatal complications faced by surrogate mothers in the 21st century. The search began in December 2024 using the query "surrogacy complications," "surrogate maternity," "gestational and perinatal complications faced by surrogate mothers," with a limit to articles published from 2000 on. We excluded articles not related to complications in surrogacy, along with editorials and abstracts. Articles written in English from the USA, Canada, Romania, and India were included. In addition, a thorough examination of the reference lists of the chosen publications was done to identify any additional articles that were pertinent to the research. Out of the 1680 abstracts identified by the search approach, only 43 were chosen to be included in this review. The majority of the research included in the analysis were cohort studies, case series, and qualitative studies.

Approximately 6 to 8 percent of pregnancies experience high-risk complications. However, surrogate mothers are anticipated to experience additional gestational complications, which are frequently associated with multiple pregnancies. A study showed that Surrogate births had lower mean gestational age during delivery (38.8 ± 2.1 vs. 39.7 ± 1.4), an increase in the rate of preterm birth (10.7% vs. 3.1%), and increased rates of low birth weight (7.8% vs. 2.4%) compared to spontaneous pregnancies. The predominant complications seen included gestational diabetes, hypertension, placenta previa, the utilization of amniocentesis, and postpartum hemorrhage. Additionally, surrogate mothers exhibited an increased likelihood of giving birth through a cesarean section. An extremely serious consequence that was documented was a cesarean hysterectomy. The majority of cohort studies have determined that the ART method itself can lead to problems. The use of autologous eggs as opposed to donor eggs did not show a significant statistical difference in complications. Studies have also demonstrated that a woman's previous obstetrical history is a stronger indicator of gestational problems than those related to age.

Majority of studies examining surrogacy complications have serious methodological limitations. According to these studies, most surrogate pregnancies had significant complications compared to non-surrogate pregnancies. Evidence indicates that assisted reproductive methods have the potential to alter the quality of embryos, and this detrimental effect cannot be counteracted, even in the presence of a healthy uterus. However, it is recommended to follow the guidelines set by expert panels while selecting a surrogate in order to prevent any negative consequences.