

INPLASY PROTOCOL

To cite: Brännström et al.
Obstetric outcome after uterus
transplantation. Inplasy
protocol 202310052. doi:
10.37766/inplasy2023.1.0052

Received: 17 January 2023

Published: 17 January 2023

Corresponding author:
Mats Brännström

mats.brannstrom@obgyn.gu.se

Author Affiliation:
University of Gothenburg

Support: None.

**Review Stage at time of this
submission:** The review has not
yet started.

Conflicts of interest:
None declared.

Obstetric outcome after uterus transplantation

Brännström M¹; Carlsson, Y²; Hagberg, H³; Bokström, H⁴.

Review question / Objective: Is delivery by elective cesarean section as safe for the mother and the neonate after uterus transplantation as after delivery by elective cesarean section for reasons such as breech and psychological indication regarding stillbirth/neonatal mortality, neonatal morbidity, maternal mortality, and morbidity?

Rationale: To compare pregnancy, obstetrical and neonatal complications at delivery by cesarean section in patients that have undergone uterus transplantation and in a normal groups of women.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 January 2023 and was last updated on 17 January 2023 (registration number INPLASY202310052).

INTRODUCTION

Review question / Objective: Is delivery by elective cesarean section as safe for the mother and the neonate after uterus transplantation as after delivery by elective cesarean section for reasons such as breech and psychological indication regarding stillbirth/neonatal mortality, neonatal morbidity, maternal mortality, and morbidity?

Rationale: To compare pregnancy, obstetrical and neonatal complications at delivery by cesarean section in patients that have undergone uterus transplantation and in a normal groups of women.

Condition being studied: pregnancy complications, delivery complications, neonatal outcome Offspring outcome.

complications: prematurity <37 gw; FGR – 10 percentile – 20 percentile; Apgar < 5 at 5 minutes; respiratory distress syndrome and PAS; need for respiratory support, CPAP & respirator; admission to the neonatal unit; death; fetal malformation; hypoxic ischaemic encephalopathy/need for therapeutic hypothermia/seizures; meconium aspiration syndrome; infection disability including neurodevelopmental delay – 2 years follow up.

Maternal obstetrical complications: preeclampsia; hypertension; diabetes; placenta previa; invasive placenta/PAS; hydronephrosis demanding stenting; intrahepatic cholestasis of pregnancy; premature rupture of membranes; cardio-respiratory arrest; death; hemorrhage; hysterectomy, chorioamnionitis and other infections; intensive care admission; length of hospital stay; postnatal depression; pulmonary embolus; stroke.

METHODS

Search strategy: Medline, Embase, Cochrane Library, Cinahl, PsycInfo, Web of Science uterus transplant* OR uterine transplant* AND cesarean OR caesarean OR parturition OR parturitions OR birth OR births OR livebirth OR livebirths OR childbirth OR childbirths OR delivery OR deliveries.

Participant or population: Patients having undergone uterus transplantation and giving birth

Intervention: Uterus transplantation followed by pregnancy and delivery by cesarean section.

Comparator: Normal population with elective cesarean section.

Study designs to be included: Observational studies, case series, case reports.

Eligibility criteria: None.

Information sources: Medline, Embase, Cochrane Library, Cinahl, PsycInfo, Web of Science.

Main outcome(s): Offspring outcome complications: prematurity <37 gw; FGR – 10 percentile – 20 percentile; Apgar < 5 at 5 minutes; respiratory distress syndrome and PAS; need for respiratory support, CPAP & respirator; admission to the neonatal unit; death; fetal malformation; hypoxic ischaemic encephalopathy/need for therapeutic hypothermia/seizures; meconium aspiration syndrome; infection; disability including neurodevelopmental delay – 2 years follow up.

Maternal obstetrical complications: preeclampsia; hypertension; diabetes; placenta previa; invasive placenta/PAS; hydronephrosis demanding stenting; intrahepatic cholestasis of pregnancy; premature rupture of membranes; cardio-respiratory arrest; death; hemorrhage; hysterectomy; chorioamnionitis and other infections; intensive care admission; length of hospital stay; postnatal depression; pulmonary embolus; stroke.

Additional outcome(s): None.

Data management: Rayan blinded assessment and the reading of articles.

Quality assessment / Risk of bias analysis: Only unique cases included.

Strategy of data synthesis: Unique cases will be identified and rate of each factor assessed.

Subgroup analysis: None.

Sensitivity analysis: NA.

Language restriction: English.

Country(ies) involved: Sweden.

Keywords: uterus, transplantation, live birth, delivery, cesarean section, pregnancy, complication.

Dissemination plans: to be published in scientific journal.

Contributions of each author:

Author 1 - Mats Brännström - Idea, data management, draft of MS, final MS.

Email: mats.brannstrom@obgyn.gu.se

Author 2 - Ylva Carlsson - search strategy, data management, draft of MS, final MS.

Email: ylva.carlsson2@obgyn.gu.se

Author 3 - Henrik Hagberg - draft of MS, final MS.

Email: henrik.hagberg@obgyn.gu.se

Author 4 - Hans Bokström - data management, draft of MS, final MS.

Email: hans.i.bokstrom@vgregion.se