

The effects of the COVID-19 pandemic on Emergency Cesarean Sections concerning Patient-start to Delivery Interval, anesthetic methods and APGAR score – a safety study

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Degree Project 30 credits
Fall 2020

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INTRODUCTION: EMERGENCY CAESAREAN SECTIONS (ECS) ARE SOME OF THE MOST URGENT SURGERIES. THE DEFINITION INCLUDES CHILDBIRTHS THAT WERE INITIALLY PLANNED TO BE DELIVERED VAGINALLY, BUT DUE TO THE MOTHER'S OR NEONATE'S CONDITION WORSENING, MUST BE RE-PLANNED FOR URGENT SURGICAL DELIVERY. THE COVID-19 PANDEMIC STARTED IN EARLY 2020 WITH MAJOR IMPACT ON HEALTHCARE INCLUDING REQUIREMENTS FOR HEALTH STAFF TO WEAR PROTECTIVE EQUIPMENT AND ALSO CONSIDER CHOICE OF ANESTHETIC TECHNIQUE.

AIMS: THIS STUDY AIMS TO ASSESS THE EFFECT OF COVID-19 ON ANAESTHESIA SERVICE FOR ECS.

MATERIAL AND METHODS: DATA WAS COLLECTED FOR ALL ECS DURING THE PERIOD MARCH 1ST – MAY 31ST, IN 2020 AND FOR THE SAME PERIOD IN 2018 AND 2019 AS A CONTROL AT DANDERYD HOSPITAL FROM THE REGISTRIES SPOR AND OBSTETRIX. MATERNAL AGE, APGAR, ASA, PREGNANCY WEEK, ANESTHETIC METHOD, CLINIC AND TIME OF DAY AND PERIOPERATIVE TIME EVENTS WERE COLLECTED. FIVE TIMELINES, APGAR AND CHOICE OF ANESTHESIA DURING THE COVID-19 PANDEMIC WERE COMPARED TO THE CONTROL PERIODS.

RESULTS: THERE WAS NO SIGNIFICANT DIFFERENCE IN THE TOTAL TIME-LAPSE FOR ECS. DURING THE COVID-ERA A LARGER PERCENTAGE OF THE IMMEDIATE CAESAREAN SECTIONS WAS PERFORMED WITHIN 15 MINUTES, COMPARED TO PRE-COVID, AND THE ANESTHETIC TIME WAS SHORTER. APGAR AND CHOICE OF ANESTHETIC WAS NOT IMPACTED. MORE SECTIONS/HOUR WERE MADE OUTSIDE OF OFFICE HOURS.

CONCLUSIONS: COVID-19 HAS NOT HAD A NEGATIVE EFFECT ON THE ANAESTHESIA SERVICE FOR ECS AT DANDERYD HOSPITAL.

KEYWORDS: COVID-19, EMERGENCY CAESAREAN SECTION, ANAESTHESIA, APGAR