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PERIOPERATIVE MANAGEMENT OF CESAREAN SECTION IN A PATIENT WITH SEVERE SCOLIOSIS: A CASE REPORT

ZHARFAN A.S., AIRLANGGA P.S.*, SANTOSO K.H., FITRIATI M.

¹Department of Anaesthesiology and Reanimation, Faculty of Medicine Universitas Airlangga/ Dr. Soetomo Teaching Hospital, Surabaya, Indonesia

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ABSTRACT

Background: Scoliosis presents distinctive concerns during pregnancy because it might affect maternal respiratory function and obstetric outcomes. We report a case of a pregnant patient with severe scoliosis receiving anaesthesia for a caesarean section.

Case: A 30-year-old woman pregnant at 34/35 weeks with severe dextroscoliosis thoracalis. The preoperative examination showed a Cobb angle of 70 degrees. The patient has signs of threat of respiratory failure. During the recovery period the patient was difficult to wean from the ventilator

Discussion: Before surgery, arterial blood gas analysis, and echocardiography were conducted to evaluate lung and cardiac function. Anaesthesia was administered by general anaesthesia method. During the surgery, continuous pulse oximetry, capnography, and invasive arterial pressure monitoring were used to guarantee the safety of both the mother and the foetus. The patient had a successful response to the anaesthetic, maintaining stable hemodynamic during surgery and achieving effective pain management. The baby in good health was born through a caesarean section without any issues.

Conclusion: Thorough preoperative evaluation, precise intraoperative supervision, and a customised anaesthetic strategy to guarantee safe and efficient treatment for pregnant patients with scoliosis having a caesarean section.

KEYWORDS: scoliosis; anaesthesia; management; perioperative; maternal health

CONTEXT

Spine abnormality in pregnant women occur rarely, with only a small percentage of cases documented in the literature [Shakil, Iqbal and Al-Ghadir, 2014]. The National Scoliosis Foundation reports that around 4-5% of the global female population has scoliosis, with a ratio of 1:9 compared to men [Aebi, 2005]. Women have a more flexible spine, whereas men have a denser spinal structure [Shakil, Iqbal and Al-Ghadir, 2014; Smit, 2020]. Scoliosis progresses more rapidly in women than in males and is of unclear cause, described as id-

iopathic [Smit, 2020]. Additionally, one side of the back may appear taller than the other, especially noticeable when bending or kneeling. Spinal abnormalities can worsen the condition of pregnant mothers [Dewan et al., 2018; Walsh et al., 2021]. Further assessment is required to determine the appropriate delivery strategy based on the degree of tilt and type of scoliosis present in the patient. Women with scoliosis may encounter difficulties during labour such as prolonged or stalled active labour due to malposition or abnormalities in the

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ADDRESS FOR CORRESPONDENCE:

Prananda Surya Airlangga
Department of Anesthesiology and Reanimation, Faculty of Medicine Universitas Airlangga/ Dr. Soetomo Teaching Hospital, Surabaya, Indonesia
Email: prananda-s-a@fk.unair.ac.id