Case Report: Regional Anesthesia Application in a Patient with Total Situs Inversus Anomaly

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Clinical Image

Total situs inversus is an autosomal recessive congenital anomaly in which the normal positions of the thoracic and abdominal organs are replaced as mirror images. Its incidence is between 1/4,000 to 1/20,000. It may be associated with cardiac, renal and respiratory anomalies. People with this anomaly often live their lives without any problems, but especially when a surgical intervention is required, there verse placement of the organs leads to changes for both the anesthesia team and the surgical team [1,2].

A 59-year-old female patient who was scheduled for Knee Arthroscopy, Height: 155 cm, Weight: 107 kg, Body Mass Index: 44.5, has Hypertension, Diabetes Mellitus and Morbid Obesity. In her preoperative evaluation, it was learned that she had a total situs inversus anomaly that was diagnosed incidentally 25 years ago. Posterior-anterior chest X-ray showed dextrocardia and gastric air level appearance on the right, Electrocardiography (ECG) was in normal sinus rhythm, and there was no additional cardiac defect in the cardiac evaluation (Figure 1). The patient’s preoperative hemogram, biochemical analysis, coagulation panel were normal; the COVID test resulted as (-). It was evaluated as ASA III according to the ASA (American Society of Anesthesiologists) classification. In the ward, 3 mg dormicum in 100 ml saline was administered intravenously for sedation 30 min before the patient came to the operating room. The patient was taken to the operating table and
regional anesthesia was administered using 10 mg heavy Marcaine in the right lateral position with a 27 gauge gray spinal needle. Heart rate and rhythm (ECG electrodes were placed in the opposite direction of routine), noninvasive blood pressure, pulse oximetry and 3 L/min nasal oxygen were administered. Since Ventricular Extra Systole (VES) occurred 10 min after the start of the surgical procedure, 100 mg Amiodarone, 40 mg Lidocaine 2% were administered. The rhythm has improved. The operation, which was hemodynamically stable, was terminated after 45 min. The patient was sent to the service without any postoperative problems (Figure 2).

Considering that various difficulties may arise in terms of anesthesia and surgery in the patient with total situs inversus anomaly, we think that it is appropriate to carry out the preoperative preparation in detail, to choose the anesthesia method according to the patient and to follow it carefully during the operation, and to be meticulous in the postoperative controls considering that the patient may have comorbidities.

References