**Introduction**

Septo-optic dysplasia (SOD), sometimes known as de Morsier’s syndrome, is characterized by optic nerve hypoplasia, pituitary endocrine dysfunction, and midline brain abnormalities (agenesis of septum pellucidum or corpus callosum) [Figures 1 and 2]. Etiology is uncertain; it is thought to be associated with genetic and environmental influences early in gestation. Mutations in HESX1 and SOX2 genes have also been associated with SOD. Hypopituitarism, hypothyroidism, hypogonadism, adrenal insufficiency, delayed growth, and development are common clinical presentations. If not diagnosed and treated, SOD can lead to severe hypoglycemia, adrenal crisis, seizures, and sudden death. Anesthetic management of SOD was associated with high perioperative mortality. A 9-year-old male child proposed for dental treatments/extractions. Medical history of SOD with hypopituitarism, hypothyroidism, and delayed psychomotor development was observed. Anesthetic induction with sevoflurane and intravenous administration of hydrocortisone plus dexamethasone were given. An infusion of 5% glucose in sodium chloride 0.9% was started. Anesthesia with sevoflurane and air, combined with local infiltration with 2% lidocaine, was maintained. During the procedure, the patient was breathing spontaneously, hemodynamically stable, with normal glucose levels measured every 30 min. The patient received 750 mg of paracetamol for analgesia and was discharged from the hospital 24 h after the procedure without complications. The mortality related to general anesthesia in such patients put us some challenges. The procedure was imperative for improving the health and quality of life of the patient, so we opted for inhalational anesthesia combined with local infiltration. We think that combined anesthesia contributed to the abolition of pain and avoided adrenal suppression contributing for the success of the procedure.

**Key words:** Child, congenital abnormalities, de Morsier’s syndrome, local anesthetics, septo-optic dysplasia, sevoflurane

**Procedure**

A 9-year-old male child, American Society of Anesthesiologists Physical State III, proposed for...
dental treatments and extractions. Medical history of SOD with hypopituitarism, hypothyroidism, and delayed psychomotor development was observed. Usual medication was hydrocortisone 25 mg/day and levothyroxine 0.075 mg/day. There were no known allergies. Physical examination of the patient was weight 50 kg, height 151 cm, blood pressure 94/41 mmHg, heart rate 115 bpm, Mallampati classification grade II, and normal cardiac and pulmonary auscultation. Blood analyses with liver, kidney, thyroid, and pituitary functions were within normal parameters.

Anesthetic induction with sevoflurane plus air and placement of an intravenous (IV) access were performed. Introduction of a reinforced laryngeal airway mask and IV administration of hydrocortisone 50 mg plus dexamethasone 4 mg was carried out. An infusion of 5% glucose in sodium chloride 0.9% at a rate of 125 ml/h was started. Before surgical incision, we asked the surgeon to infiltrate the area with 2% lidocaine. Anesthesia with sevoflurane and air, combined with local infiltrative anesthesia, was maintained. During the procedure, the patient was breathing spontaneously, hemodynamically stable, with normal glucose levels measured every 30 min. The patient received 750 mg of IV paracetamol for analgesia. The procedure lasted about 80 min and the patient was transported to the postanesthetic care unit, conscious and in spontaneous ventilation. The child was transferred to the ward after 6 h and discharged from the hospital 24 h after the procedure. During this period, there were no complications.

Conclusion

The mortality related to general anesthesia in such patients put us some challenges. The procedure was imperative for improving the health and quality of life of the patient, so we opted for inhalational anesthesia combined with local infiltration. We think that the local infiltrative anesthesia contributed to the abolition of pain and avoided adrenal suppression which was a decisive factor for the success of the procedure in this patient. We believe that combined anesthesia (general and regional) is the best option for this type of patients.

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Conflicts of interest

There are no conflicts of interest.

References