INTRODUCTION

Despite the success of the World Health Organization’s policy for global eradication of poliomyelitis, this disease is still endemic in some countries. Besides that, in the last few years, there is a low demand for polio vaccination in children despite the campaigns. This can be a big challenge for medicine in some years: The returning of poliomyelitis and its consequences. Based on that, the anesthesiologist should be familiar to these patients and their particularities.

Although many post-polio survivors have got great anatomical and physiological problems that increase anesthetic risk, sometimes they present only minimal sequelae. Even so, just a history of poliomyelitis can difficult a correct evaluation for anesthesia procedure when the anesthesiologist is not familiar to the situation. The decision to select regional or general anesthesia should be made on an individual patient basis with due consideration for risks versus benefits. Many anesthesiologists are hesitant to administer regional anesthesia to patients with preexisting neuromuscular disorders because of concern about exacerbating existing disease or difficulty evaluating complications.

CASE REPORT

A 26-year-old primigravida patient, ASA I, 39-week gestation, presented with 24 h premature rupture of membranes, without active labor. She had been in anesthetic pre-operative clinic 2 weeks before and had described poliomyelitis with 1 year old and complete recovering in childhood. With 16-year-old, she was submitted to appendicectomy through spinal anesthesia presenting weakness in entire body for approximately 24 h. At physical examination, the only sign was shorter tibial tendon of both legs. For the cesarean, after volume expansion with cristaloids, the choice was an epidural anesthesia with 15 mg of bupivacaine 0.3% (without epinephrine) and morphine 2 mg. “The surgery was initiated after 4 min of blockade with T4 sensitive level reached. Hypotension and tachycardia were corrected with metaraminol 1 mg.” After 50 min, the procedure was finished with the same metameric level of anesthesia, but with cardiovascular stability. The entire recovering from anesthesia has occurred after 11 h. An elevated consume of analgesics (nonsteroidal inflammatory drugs and opioids) and antiemetics was observed.

RESULTS

One of the most important aspects in pre-operative evaluation is to clarify clinical situation to medical team and patient, and
DISCUSSION

Pre-operative is the most important period, especially in post-polio patients. A careful history and physical examination are, as always, vitally important. Post-polio syndrome symptoms are disabling fatigue, muscle weakness (including dysphagia and reflux disease), joint pain, cold intolerance and swallowing, and sleep and breathing problems. Pulmonary function studies are recommended in all polio survivors that will experience a surgery, even those without pulmonary issues. In patients who have laryngeal or swallowing problems, an upper airway evaluation is advised even when the general anesthesia is not the choice because of several cases of one paralyzed cord or bilateral cord paralysis that has occurred in post-operative after upper extremity blocks or intubation. Because the poliovirus damaged the brain stem area, called reticular activating system, in those who had paralytic and non-paralytic polio, a little anesthetic goes a long way and lasts a long time. Post-polio patients are more sensitive to virtually any drug. Since that, muscle relaxants can be a problem if they are oversedated or not complete reversal at the end of the surgery, especially in those patients who have pulmonary issues. Spinal anesthesia can be a solution, and neuroaxial blockade should not be considered an absolute contraindication within these patient population, despite the recommendations in the past. Although an extended duration of the blockade, no study, including ours, showed a new or worsening neurologic deficit when compared to pre-operative findings.

REFERENCES
