Central core disease (CCD) is a dominantly inherited congenital myopathy. CCD is also associated with muscular and skeletal abnormalities such as abnormal curvature of the spine (scoliosis), hip dislocation, and joint deformities. CCD and malignant hyperthermia (MH) are both associated with mutations in the ryanodine receptor on chromosome 19q13.1. An 11-year-old boy with CCD complicated with severe scoliosis was scheduled for spinal fusion surgery under general anesthesia. Furthermore, he had trismus caused by temporomandibular contracture. He was considered as MH susceptible. Anesthesia was managed with remifentanil and propofol without using muscle relaxants and volatile anesthetics. We could intubate the trachea with Airtraq laryngoscope without any complications. The perioperative course was uneventful.