The argon beam coagulator (ABC) is often used for hemostasis during and after surgery on parenchymatous organs. In experienced hands, ABC is considered to be a relatively safe tool. However, “the possibility that the flow of argon gas onto bleeding tissue may cause venous gas embolism” is an important safety consideration (1). It is known that when ABC systems are used in closed cavities, such as in laparoscopic procedures, there is risk of argon gas embolism caused by intra-abdominal over-pressurization (2,3). Systemic gas embolism has been reported in literature with ABC use during hepatic surgeries in the adult population, more often during laparoscopic surgery; however, this complication has not been reported in the pediatric population during laparotomy in almost twenty years (4). With parental consent, we report a case of suspected argon gas embolism with the use of the argon beam coagulator during an open pediatric liver resection on a 20-month old patient. Fortunately, the patient recovered with only supportive care. Pediatric anesthesia caregivers need to be aware of this serious and life-threatening complication during pediatric hepatic surgery and be prepared to recognize and treat the complication if it occurs.

REFERENCES