Conclusions Intrathecal analgesia may be a successful short-term option for pain relief in opioid tolerant patients with acute postoperative refractory pain.

Methods 42 years old, female, ASA II, diagnosed with peri-prosthetic infection is proposed for complete resection of foreign material and placement of a spacer.

Combined epidural-general anesthesia was performed. The epidural blockade was performed uneventfully, at L3-L4 interspace. An ultrasound-guided central venous catheter (CVC) was placed in the right IVJ, without complications. The surgery was successful and postoperative analgesia was provided by PIEB with hourly boluses of 5 mL (ropivacaine 0.15% and fentanyl 1.5 μg/mL).

On the first postoperative day, the patient presented ptosis, miosis, and conjunctival hyperemia on the right side. It was assumed to be a functional HS caused by the epidural analgesia and the catheter was removed.

A week later, the patient maintained the clinical condition. It was concluded that HS was secondary to IVJ cannulation and the CVC was replaced with a left subclavian CVC.

Results HS remains a rare complication of IVJ catheterization. Direct needle puncture of the cervical sympathetic fibers or compression of these structures by hematoma was the two most common mechanisms.

Conclusions The rapid recognition of the condition allowed to consider different etiologies and their correction in order to limit the duration of symptoms and possible complications.