Interactive Case Report in Anesthesia/Critical Care

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Citation


Abstract

CASE REPORT

A 68 year old 81 kg male with a history of non-hodgkins lymphoma and moderate adenocarcinoma of the prostate presents for transurethral resection of the prostate (TURP). The preoperative evaluation reveals history of smoking (80 pack-years), normal ejection fraction and heart valves, normal chest X-ray and EKG. No other significant findings.

He was taken to operating room and monitored as per routine for cystoscopy and TURP. After appropriate preoxygenation, general anesthesia was uneventfully induced with fentanyl, propofol and rocuronium. The patient was intubated, ventilated and placed in lithotomy position. The operative procedure was started without difficulty. After 80 minutes, the patients temperature had dropped from 35.9 oC at the beginning of the case to 32.9 oC. Blood was sent to the laboratory to check the electrolytes (because of the lenght of the surgery). The vitals signs were stable. Shortly thereafter the following values were sent back from the laboratory to the operating room: NA 109 mEq/L, K 4.7 mEq/L, CL 83 mEq/L, GLUCOSE 83 mg/dl, Hct 34. The anesthesiologist informed the surgeon about the findings and the surgery was then stopped. The patient was transferred to the surgical intensive care unit (SICU).

At arrival in the SICU: The patient was still intubated and sedated. The body temperature was 33.5 oC. The laboratory measurements revealed: NA 107 mEq/L, K 5.7 mEq/L, CL 79 mEq/L, CO2 109 mEq/L, ammonia level of 60 mmol/L, and serum osmolarity of 273. A radial arterial catheter and a central venous catheter were inserted and rewarming with hot air (Bair Hugger) was initiated. EKG and chest Xray are shown below.
Figure 3
Monitor strip EKG

Figure 4
Chest X-ray at arrival SICU:

Chest X-ray after 24 hours in SICU:

Questions

1. What is your diagnosis?
2. What happened intraoperatively?
3. What are the potential complications of this syndrome?
4. How would you treat this phenomenon?
5. How can it be avoided?

References
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