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**Summary:** We present a case of a patient with a history of hypothalamic insufficiency who came to our ambulatory center for elective orchiopexy with a core body temperature of 31 degrees centigrade. The anesthetic management and concerns are briefly reviewed.

The patient's past medical history was notable for extreme prematurity, hypoxic encephalopathy, seizures, SIADH, global developmental delay, and recognized hypothalamic insufficiency manifest as impaired thermoregulation. There was no associated hypopituitarism and the child was on no medications. Past surgical history included tracheostomy and subsequent closure, G-tube, and Nissen fundoplication.

On admission to the Pediatric ASU the child was with his normal nursing aide who had cared for him for some years. Of note, the patient was admitted in the autumn on one of the first cold days of the season. Initial vital signs included: HR 40, BP 86/55, and rectal temperature of 31°C. O<sub>2</sub> saturation could not be reliably recorded. The child weighed 30.1 kg.

After discussion with the patient's urologist, it was decided to actively rewarm the patient with a Bair Hugger forced hot-air system and to defer the decision whether to proceed with the scheduled surgical procedure. An IV was established for emergency medications. After 5 hours of warming with a hot-air temperature of 43 degrees, the patient's temperature was 36.1°C. Laboratory studies were obtained, including glucose and coagulation tests, and revealed no abnormalities. After conferral with urology, we decided proceed to the OR. ASA monitors are placed, and the patient was induced with propofol. An LMA was inserted and the case progressed uneventfully. The child was admitted overnight for observation and was discharged the next day.

**Discussion:** Hypothermia is defined as a core body temperature < 95°F (35°C), with mild considered to be 95-91.4°F (35-33°C); moderate 89.6-82.4°F (32-28°C); severe 80.6°F (27°C) and below. Management includes rewarming and appropriate cardiac monitoring (ECG) to insure cardiopulmonary and hemodynamic stability. When indicated, a trauma assessment should be performed. In addition to coagulation studies, blood sugar determination and assessment of both renal and hepatic function may be in order (particularly in cases of severe hypothermia). In this case we were confident we were dealing with hypothermia due to inadequate insulation in a child with hypothalamic insufficiency and an inability to communicate with his caregivers. Once the patient was rewarmed, vital signs were normal and we felt comfortable proceeding with the scheduled procedure.

Hypothalamic insufficiency may be congenital or acquired. Etiologies include tumors, inflammation, infection, mass lesions, interruption of blood supply, or (as in our patient's case) an hypoxic insult at birth. Care should take to avoid hypoxia and acidosis as cardiac drugs and defibrillation are less effective with hypothermia. Adequate counseling of patient's health care providers is also critically important.

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