Causes of lactic acidosis are classically divided into

- Type A: associated with hypoperfusion and hypoxia, and
- Type B: associated with certain preexisting diseases, intoxicants or inborn errors of metabolism (1).

Lactate levels are commonly used as biomarkers for perfusion and seem to correlate with severity of injury in the ICU setting (2). Prolonged infusions of propofol in children and adult have been associated with lactic acidosis, presumably due to effects on mitochondrial function (3).

Elevated post-operative lactate levels have been previously described in an adult ICU population after neurosurgical operations, even though the underlying pathophysiology remained unclear (4). Lastly, elevated lactate levels have also been found in the CSF of patients with intracranial hemorrhage, benign mass lesion and malignacies as well as in the cyst fluid of pediatric cranio-pharyngioma patients (5, 6). Breaching of the arachnoid membrane seemed to lead to higher serum lactate levels in these patients.

The hemodynamic stability and absence of significant intraoperative hypoxia seem to make a type A lactic acidosis unlikely in our patient.

We speculate that her primary disease may have caused increased lactate levels in the CSF and/or in the cystic component of her cranio-pharyngioma and that the surgical manipulation led to increase systemic lactate levels.

REFERENCES