Bifid uvula: Anesthetist don’t take it lightly!

Sir,

Bifid uvula means a cleft in uvula. It is often considered as a marker for sub mucous cleft palate. Compared to the normal one, it has fewer amounts of muscular tissues. It is commonly noticed in infants and is rarely found in adults. It can cause problems in ear. Sometimes it is unable to reach the posterior pharyngeal wall during swallowing, causing...
regurgitation. It may produce velopharyngeal insufficiency and nasal intonation. It does not cause many problems in view of airway management. It may be associated with aneurysm in different vascular bed like coronary and abdominal aortic aneurysm. We are presenting herein a case of bifid uvula with normal airway anatomy that was initially posted for retinal surgery, postoperatively diagnosed as cerebral aneurysm rupture, and later underwent a clipping surgery. To the best of our knowledge, there is no report on the association of cerebral aneurysm in bifid uvula patient with such a devastating complication in a 16-year-old boy. We obtained written consent from the parent of the patient to report this case.

A 16-year-old boy, weighing 52 kg, was presented in preanesthetic clinic for fitness for retinal surgery. He is of American Society of Anesthesiology physical status class I, with all other blood reports and chest X-ray within normal limits. Airway examination was normal, except for bifid uvula [Figure 1] and mild hypertelorism. No other clinical features were suggestive of any syndrome. Anesthetist cleared him for surgery. In view of aspiration, he was premedicated with ranitidine 150 mg and metoclopramide 10 mg at night and early morning respectively. He was induced with morphine 6 mg, propofol 120 mg, and vecuronium 6 mg. During intubation, 4 min after induction, his non-invasive systolic blood pressure increased to 210 mmHg due to laryngoscopic response. Immediate 20 mg propofol bolus was given in addition to induction dose. Intra-operative hemodynamics remained within acceptable range. He developed T-wave inversion in Lead II (may be juvenile T-inversion). Surgery took 180 min. We planned for full awake extubation and used esmolol 30 mg to prevent extubation response. The patient was not responding to command (E2V1M5-Glasgow Coma Scale; GCS) even after full muscle relaxant reversal (train-of-four ratio 97%). His bilateral pupils showed anisocoria. We waited for next 1 hour, but there was no change in the GCS. He was then shifted to intensive care unit (ICU), and computed tomography (CT) was performed after consulting the neurologist and neurosurgeon. CT showed ruptured aneurysm in the middle cerebral artery [Figure 2]. Immediate nimodipine was started, and radiological and cardiological evaluations were done. Then, the patient was shifted in neurosurgical theatre for clipping. Craniotomy and clipping surgery was done while maintaining a stable hemodynamics and shifted with intubated. Postoperative ICU evaluation failed to discover any other congenital anomalies. He was successfully extubated and discharged to home.

Bifid uvula, although looks benign, apparently sometimes may be associated with anomalies leading to catastrophic complications. Cornelia de Lange syndrome is a rare congenital syndrome associated with bifid uvula and submucous cleft palate that causes problems in airway due anatomical distortion. Bifid uvula may be associated with increased risk of schizophrenia, mild mental retardation, and chromosomal disorder, diagnosed by fluorescent in situ hybridization technique. Loeys–Dietz syndrome (autosomal dominant) is a genetic syndrome with clinical features overlapped with Marfan syndrome, but etiology due to mutations in the genes encoding transforming growth factor beta receptor 1. Hypertelorism, cleft palate, or bifid uvula are the major findings. Arterial aneurysms/dissections, arterial tortuosity involving aortic and its branches, carotid, vertebral, extracranial artery, abdominal aorta and its branches, common iliac, and popliteal arteries are reported in this syndrome. In our case, bifid uvula may have been a warning sign of the syndrome with internal anatomical or functional changes without any external manifestation akin to the tip of an iceberg. Although cerebral aneurysm is very rare with bifid uvula, it may be a part of the abovementioned syndromes. Thus, whenever anesthetists plans to conduct
a case with bifid uvula (even though non-syndromic),
they must ask for detailed family and genetical history,
clinical examination relevant investigations, and specialty
consultation. Adequate preoperative preparation and,
accordingly, intra-operative management can prevent
unexpected complications in such patients.

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Methanol toxicity following esmolol infusion
in a post-operative case of pheochromocytoma

Sir,
Esmolol is an ultra-short acting beta-adrenergic receptor
blocker used in anesthesia for its cardio- selective
anti-adrenergic effects. [1,2] It is known that esmolol is
metabolized by plasma and red blood cell esterase to
methanol in a low concentration.[1] We are reporting herein
a case of inadvertent methanol toxicity following esmolol
infusion in a postoperative case of pheochromocytoma.
The patient's family reviewed this report and gave written
consent for publication.

A 14 -year-old girl with a diagnosed case of right-sided
adrenal pheochromocytoma (sporadic) was posted
for open resection [Figure 1]. Preoperatively, she
was of American Society of Anesthesiology physical
status class II (hypertensive) on oral antihypertensive
medication (prazocin 3 mg and metoprolol 50 mg, twice
daily). Preoperative electrocardiogram (ECG) showed sinus
tachycardia and left ventricular hypertrophy. Transthoracic
echocardiography (TTE) showed hypertrophic left ventricle
with 50% left ventricular ejection fraction.

She was premedicated with previously prescribed drugs
and alprazolam 0.25 mg. Under basic monitoring (ECG,
non-invasive blood pressure, pulse-oximetry), thoracic
epidural was placed at T10-11 level. Arterial line was