### Asymptomatic congenital subglottic stenosis in a neonate - infant feeding tube as a “Guardian angel!”

Sir,

Unanticipated difficult airway and absence of guidelines for its management in neonates is a piquant situation for an anesthetist.\(^1\,^2\)

Presentation of congenital subglottic stenosis (SGS) in neonates may vary from asymptomatic to frank stridor.\(^3\) We present rescue airway management of a 2-day-old newborn who presented with intestinal obstruction secondary to high anorectal malformation.

A 2-day-old full-term male neonate weighing 2.5 kg who had an uneventful vaginal delivery, was listed for exploratory laparotomy. Antenatal history of the mother was inconspicuous. The routine evaluation was unremarkable.

Standard protocols for anesthesia care were followed. Rapid sequence induction was done using intravenous thiopentone (5 mg/kg) and succinylcholine (2 mg/kg). Intubation attempts using Millers blade (size 0) with endotracheal tube (ETT) of size 3, 2.5, and 2 mm internal diameter (ID) failed as none of them could be negotiated beyond the subglottic area. Gentle bag and mask ventilation was initiated, and depth of anesthesia was maintained. Facing nonavailability of the pediatric fiberoptic bronchoscope and ear-nose-throat (ENT) specialist, we prepared a modified smaller ETT with a 6 French gauge (Fr) sized infant feeding tube (IFT) whose length was reduced to 10 cm [Figure 1]. The proximal end of the IFT was attached to a 3 mm ET tube connector [Figure 2a]. A stylette obtained from hydrocephalus shunt system [Figure 1] was used to aid intubation. Intubation was successful in the first attempt and with the presence of adequate air leak, the tube was secured at 6 cm [Figure 2b]. Anesthesia was maintained on sevoflurane, O\(_2\) and air with FiO\(_2\) of 0.5.

No intra-operative complication was observed during the surgery which lasted for 45 min. At the end of surgery, adequate airway patency was revealed by application of positive pressure with a closed circuit pressurized to 25 cm of H\(_2\)O. The baby was reversed and extubated in the presence of an ENT surgeon. The postoperative course was uneventful. Subsequently, the baby was diagnosed with Grade II SGS on rigid bronchoscopy and was managed accordingly.

SGS is characterized by subglottic diameter <4 mm in term newborn and <3.5 mm in preterm neonates.\(^4\) Congenital SGS may be asymptomatic, and infants may not present for treatment for weeks after birth.\(^5\) SGS can be suspected on the basis of gestational age, antenatal history of polyhydramnios, previous intubation, other congenital disorders or history of recurrent URTI.\(^6\)

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**Figure 1: Components of modified endotracheal tube**
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Chetna Shamshery1, Ashish Kumar Kannaujia2, Rajashree Madabushi1,2, Vansh Priya1,3
1Department of Anaesthesia, SGPGIMS, 2Department of Anaesthesia, T S Misra Medical College and Hospital, Lucknow, Uttar Pradesh, 3Department of Anaesthesia and Pain Medicine,

Narayan Hrudalaya, Bengaluru, Karnataka, India

Address for correspondence:
Dr. Vansh Priya,
3/279, Vishwaskhand, Gomti Nagar, Lucknow - 226 010,
Uttar Pradesh, India.
E-mail: vanshkhr@gmail.com

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