Post-Operative Mutism In A Pediatric Patient After General Anesthesia

Alexander B Froyshteter MD, Behnoosh Shayegan MD
Department of Anesthesiology, Rush University Medical Center, Chicago, IL, USA

Introduction
This case presents a unique occurrence of functional mutism in a pediatric patient after general anesthesia and prolonged intubation in the PICU.

Case Description
A 3-year-old female with past medical history of prematurity and significant subglottic stenosis with recurrent croup underwent laryngotracheal reconstruction. She had normal language development pre-operatively and previously undergone several general anesthetics without any complications. After her laryngotracheal reconstruction, she required an 11-day intubation in the PICU to allow for tracheal healing.

After extubation and gradual weaning off her sedation, the patient was observed with flat affect and to be non-vocal without any localizing motor deficits. She was non-verbal even during painful procedures such as blood draws. ENT examination revealed normal vocal cord function and healing of the reconstructive site. Extensive neurological evaluation including EEG and MRI brain was negative for stroke or seizure. A functional selective mutism diagnosis was made. She made complete recovery of her speech over a two-week period after being discharged home.

Pediatric Mutism
Mutism is defined as inability or unwillingness to speak, thus exhibiting absence of verbal output. Mutism is a rare multidimensional childhood disorder, typically affecting school age children. It was originally described in 1877 as aphasia voluntaria. It must be distinguished from aphonia, aphasia, and dysarthria.

Organic mimics can include cerebral vascular accident, Landau–Kleffner syndrome (an acquired epileptic aphasia), and cerebellar mutism syndrome (after posterior fossa surgery).

Non-medication treatments involve psychotherapeutic approaches of psychodynamic, behavioral, or family therapy. Medication-based options include SSRIs.

Discussion
It has been proposed that lack of speech in children may reflect an effective avoidance strategy to decrease emotional and physiological distress. This case demonstrates that prolonged post-operative intubation and extensive sedation in the intensive care unit can have a significant negative psychological impact on the pediatric patient. Although it is important to investigate and discard any organic causes of neurological deficits, a diagnosis of functional disorder must also be considered.

References