# Anorexia Nervosa Following A Pharyngeal Flap Operation

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A 15-year-old-female with developmental problems underwent an uncomplicated superiorly based pharyngeal flap operation for velopharyngeal incompetence. Postoperatively she developed anorexia nervosa resulting in severe electrolyte imbalance with weight loss necessitating prolonged hospitalization and intense psychiatric counseling.

**KEY WORDS: Pharyngeal flap, velopharyngeal incompetence, anorexia nervosa**

## Case Study

The patient was initially seen in the South Florida Cleft Palate Clinic at the age of six for a severe speech problem involving articulation. Physical examination failed to demonstrate any evidence of clefting. However, the soft palate was felt to be inadequate for velopharyngeal closure. Following 18 months of intensive speech therapy with no improvement, a cephalometric examination demonstrated that . . ."(soft palate) is very short and does not make contact with the posterior pharynx."

At age eight, a palatal pushback with an island flap was performed. The postoperative course was uneventful. Nasal emission continued despite speech therapy and, at the age of 13, a videofluroscopic evaluation indicated that . . ."(the patient) is not achieving velopharyngeal closure except during swallowing." Further surgical obturation with a pharyngeal flap was planned.

At age 15, an uncomplicated superiorly based pharyngeal flap was performed with an uneventful immediate postoperative course. Her weight at this time was 153 pounds with normal blood chemistries.

Ten days postoperatively, the patient was readmitted for refusal to eat and with self-induced vomiting. At admission, her electrolytes were Na 157, K 5.0, BUN 134, and her body weight was 139. She demonstrated extreme lethargy, drooling, and constant spitting. Physical examination indicated that the pharyngeal flap had detached from the soft palate.

Her inappropriate behavior continued, and she refused ENT examinations and barium swallows. Intravenous therapy was necessary for hydration and restoration of normal electrolytes. The psychiatric consultant felt that this was regressive behavior and noted that the patient would dump food into the toilet. Two weeks following hospitalization, an examination under anesthesia revealed a detached pharyngeal flap with a healed posterior pharynx and soft palate. There was no evidence of a stricture or other anatomic reason for the inability to swallow. Nasogastric tube feedings were initiated as the patient's weight had then dropped to 121 pounds.

Attempts to discontinue the tube feedings resulted in dehydration and electrolyte disturbances. Psychiatry felt that, since the patient had behavioral problems and suffered from auditory hallucinations telling her not to eat, she had functional disorder manifesting itself as an adjustment reaction to the surgery. She was started on Thorazine.*

Four weeks after her original hospitalization, her weight dropped to 112 pounds. This represented a loss of 41 pounds since surgery.

After six weeks in the hospital, she was discharged to the care of her mother even though she was still on tube feedings. Over a period of four more weeks, the tube feedings were stopped, and she has since maintained her weight while under intensive psychiatric counseling.

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* Chlorpromazine—Smith, Kline & French.

## Discussion

The immediate possible postoperative complications of pharyngeal surgery such as bleeding (Owsley 1965), infection (Musgrave 1960; Tucker 1974), airway obstruction (Graham 1973) and even death (Nylen 1966) are well known to most surgeons. With pharyngeal flap surgery the late complications such as flap detachment (Yules 1970), obstruction of the nasopharynx (Robson 1977), continued nasality (Dunn 1951) or even denasality (Smith 1963) have been documented in the literature.

Anorexia nervosa can be a life-threatening condition characterized by a self-imposed, severe dietary limitation leading to extreme loss of weight, malaise, serious malnutrition, and other associated symptoms. Characteristically, the patient is female, at or around the age of puberty. Spontaneous or self-induced vomiting is common and was observed in this patient (Freedman 1976).

From the history, the patient appeared to have had at least a life-long overdependent relationship with her mother. The pharyngeal flap surgery was, at worst, a precipitating stress in a complicated, probably multiproblematic family system in which this obviously sick youngster played a significant role. As with other children suffering from psychophysiological disorders, the youngster who eventually develops anorexia nervosa is often not recognized as having serious psychological difficulties until there is a painful precipitating event. In this case, it was the pharyngeal flap. Fortunately this is a rare occurrence and should not be received as a typical complication of pharyngeal flaps. This experience has alerted us, however, to the necessity for careful psychological workups on patients whose histories are suspect.

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