Spur of the Moment Removal: A Rare Complication of Esophageal Manometry

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Defining EXCELLENCE in the 21st Century

LEARNING OBJECTIVES

1. Present and discuss a case of a novel adverse event from routine manometry

INTRODUCTION

Esophageal manometry is a safe procedure that analyzes the contraction pressure of the esophagus. The well-known risks are patient discomfort, nasal trauma, and retching. To our knowledge and search of present literature, there has not been a reported incident of esophageal manometry probe becoming lodged in the nasopharynx. Here, we present a case of manometry probe meeting resistance upon attempted extubation, ultimately requiring endoscopic removal.

CASE PRESENTATION

A 53-year-old female with a history of GERD and hiatal hernia presented for routine esophageal manometry as part of anti-reflux surgery workup.

COURSE/RESULTS

- The manometry probe was inserted into the right naris and advanced without difficulty.
- The procedure was performed without complications.
- Upon attempted extubation, the probe met resistance.
- Multiple providers attempted extubation, all unsuccessful.
- A small amount of blood was noted in the right naris, and intranasal lidocaine 2% gel was administered.

COURSE/RESULTS

Figure 1a. Manometry probe visualized on EGD

Figure 1b. Sacrificed manometry probe

- The patient experienced increasing discomfort, and efforts to extubate were stopped.
- Planned EGD was then performed with manometry probe in place.
- Blood was seen in the posterior oropharynx, and manometry probe was visualized passing through the oropharynx.
- The gastroscope was then advanced into the stomach where the end of the probe was visible.
- Removal of the probe was unable to be performed even under sedation, and ultimately the probe had to be sacrificed.
- The end of the manometry probe was grasped using a snare and the distal end was removed through the mouth.
- Due to the large connectors, the proximal end of the manometry probe exiting through the naris was cut, and the distal end of the probe was pulled through the mouth without resistance.
- EGD procedure was then completed.

REFERENCES

Baldwin D, Puckett Y. Esophageal Manometry. 2021 Sep 28. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan–. PMID: 32644663.

Claudiu Manea, MD, PhD "Endoscopic Septoplasty" Slide 7. December 2021 presented at 5-SIR (Society of Italian Rhinology). Rome, Italy.

DISCUSSION

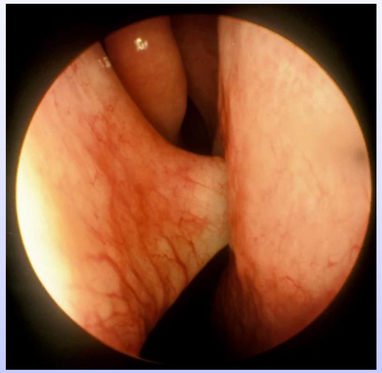

Figure 2. Anterior nasal spur, image taken from *Endoscopic Septoplasty* Dr. Manea

- The patient was subsequently evaluated by ENT for nasal obstruction and was found to have a septal deviation with a very large right posterior septal spur that was contacting the lateral nasal wall on nasal endoscopy.
- We suspect that the spur acted similarly to a one-way valve; allowing easy insertion of the probe and difficulty with removal given the positional anatomy of the spur.

CONCLUSION

In conclusion, we report a novel adverse event from routine manometry procedure leading to traumatic removal and ultimately sacrificing the manometry probe due to a large posterior nasal spur.