

AB21-4 - Extensive (but Reversible) Esophageal Ulceration by Balloon Cryoablation

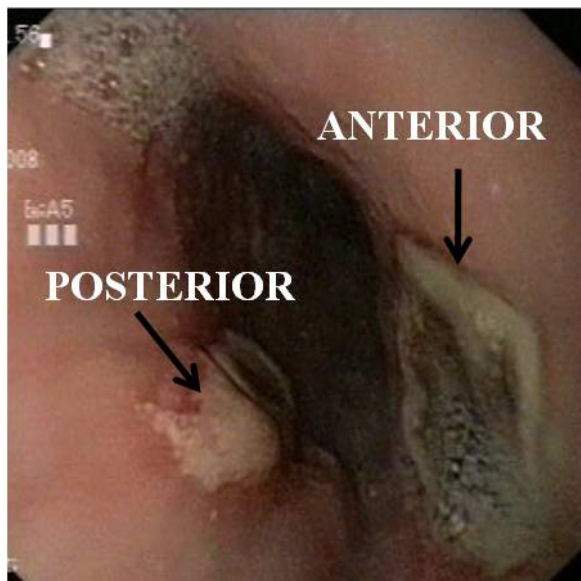
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Introduction: Clinical studies suggest that balloon cryoablation for PV isolation offers an advantageous safety profile. However, the effect of cryoballoon ablation on the esophagus has not been fully determined. Significant luminal esophageal temperature (LET) changes occur during ablation with the 23/28mm balloons, and systematic post-procedural EGD has revealed the potential for significant esophageal ulcerations. Herein, we present a case of dramatic EGD changes after cryoballoon ablation.

Methods: N/A

Results: A 51y.o. man with a history of paroxymal AF resistant to a Class I AAD, HTN, and AFL underwent PVI with the 28 mm cryoballoon. Fifteen ablation lesions (240 s in duration) were delivered, resulting in 13 (87%) significant ($\Delta > 1^{\circ}\text{C}$ from baseline) LET drops. During RIPV ablation, the 1st lesion resulted in an LET of 12.5°C (baseline: 36.5°C), and the next 2 reached a nadir of $\leq 0^{\circ}\text{C}$ (since the nadir plateaued for $> 10\text{s}$, and the temp probe could not display temps $< 0^{\circ}\text{C}$, it is likely that a subzero nadir occurred). EGD at 1-week post-ablation revealed significant ulceration on both the anterior & posterior esophageal walls (Figure). The patient was asymptomatic, and follow-up EGD at 1-month revealed complete resolution of the ulcers.

Conclusions: This case study reveals the potential for subzero LETs during cryoablation, resulting in anterior & posterior esophageal damage. Although no AE fistula has been observed in the > 5000 cases performed worldwide, the dramatic EGD changes in this case indicate the importance of vigilance in determining the full range of esophagus effects by cryoablation.



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