

Introduction

- The development of esophageal squamous cell carcinoma (ESCC) from a Zenker's diverticulum (ZD) is a rare event
- We present a case of an elderly patient with recurrence of ZD despite multiple surgical interventions who was ultimately found to have ESCC arising from his ZD

Case Description

- 83M with symptomatic ZD for 20 years presented with worsening dysphagia
 - 4-years prior, he had undergone a cricopharyngeal myotomy with resolution of ZD
 - He did well for 50-months but had recurrence of dysphagia
- Initial imaging (**Fig 1.**) confirmed recurrence of a large ZD and patient underwent multiple surgical interventions but with limited clinical improvement. Post-operative imaging still displayed a smaller but persistent ZD (**Fig 2.**)
- He was readmitted 4-months after his surgeries with worsening dysphagia, odynophagia, hemoptysis, and unintentional weight loss.
- Endoscopic evaluation into the cervical esophagus revealed a mass concerning for malignancy and biopsies revealed ESCC (**Fig. 5**)
- **Follow-up:** Patient transitioned to palliative care

Imaging

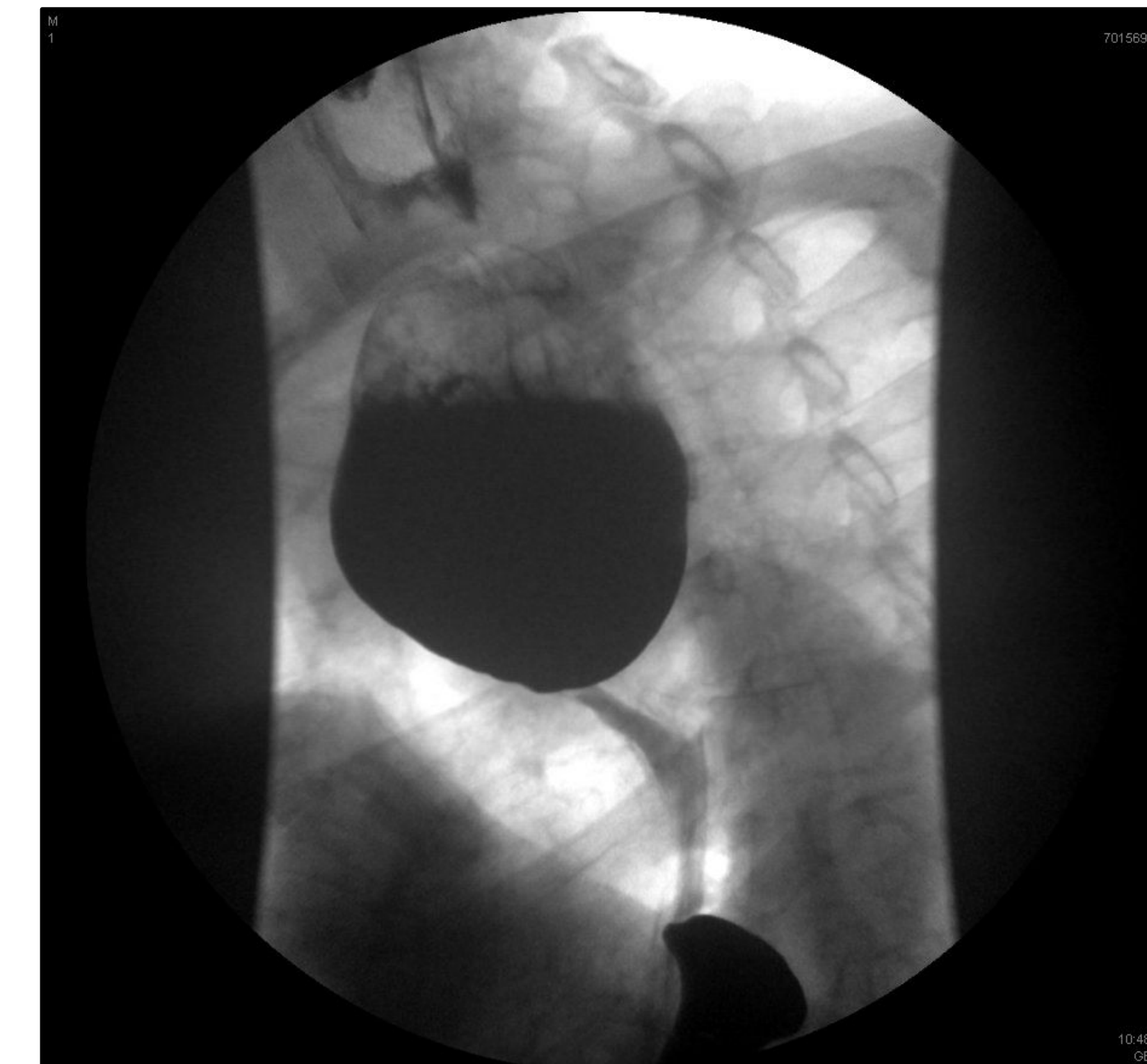


Figure 1: Initial esophagram prior to surgery demonstrating a large ZD

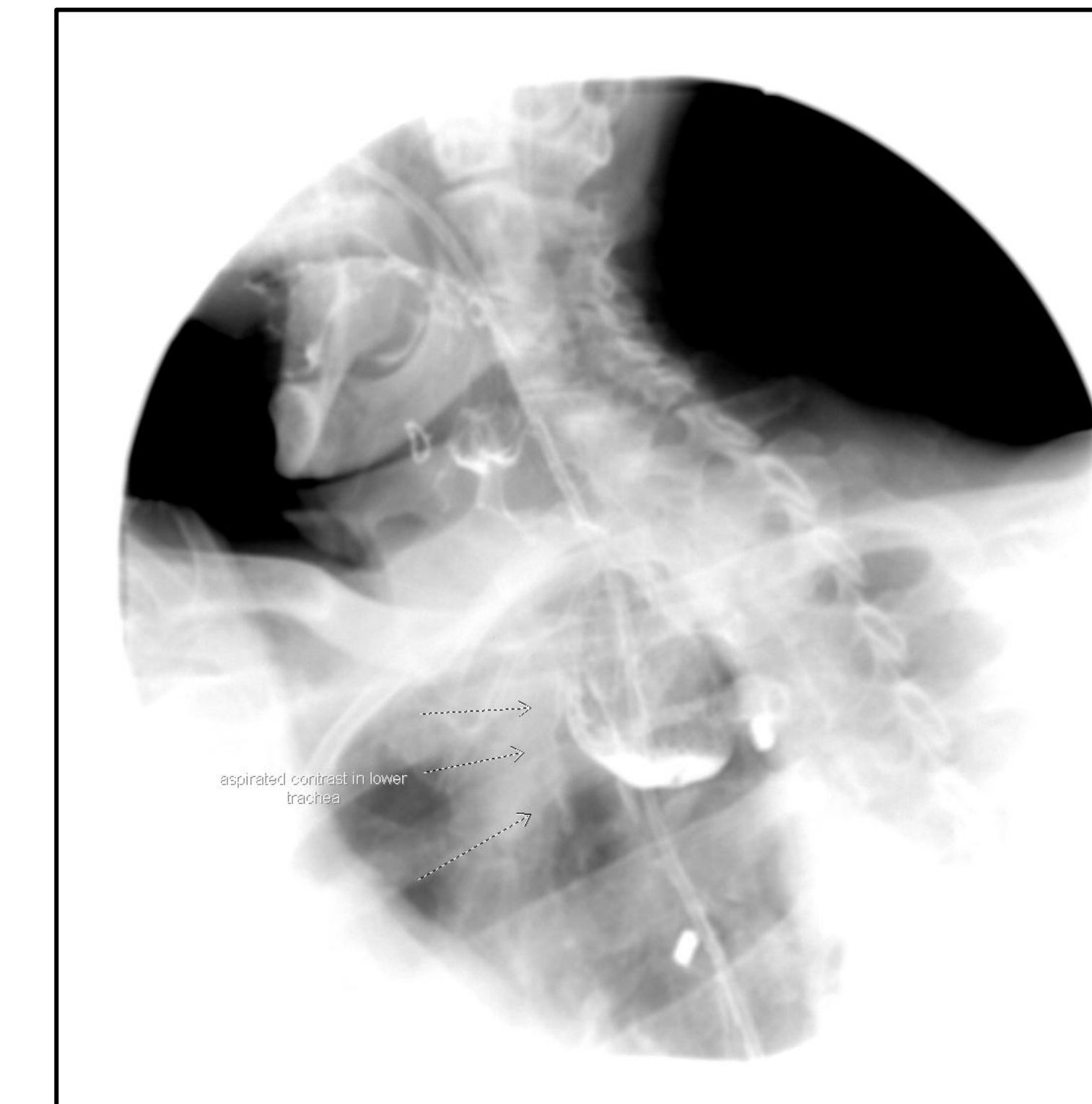


Figure 2: MBS following surgery showing a smaller but persistent ZD

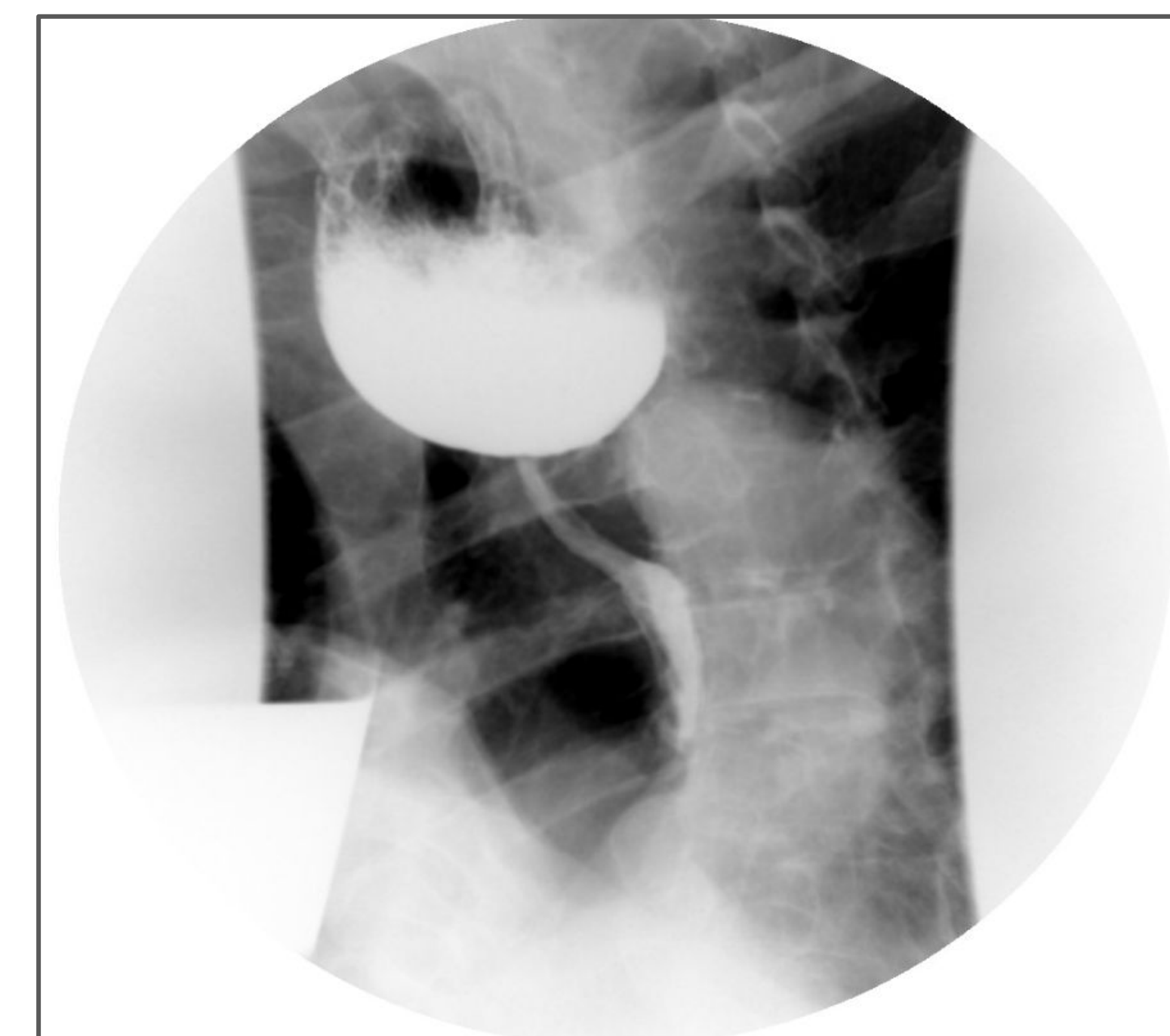


Figure 3: Repeat esophagram 4-months post-surgeries with recurrence of a large ZD



Figure 4: CT axial view demonstrating persistent ZD



Figure 5: Endoscopic view with a circumferential ulceration with firm friable tissue measuring 2-3 cm and extending from the distal inner rim of the ZD

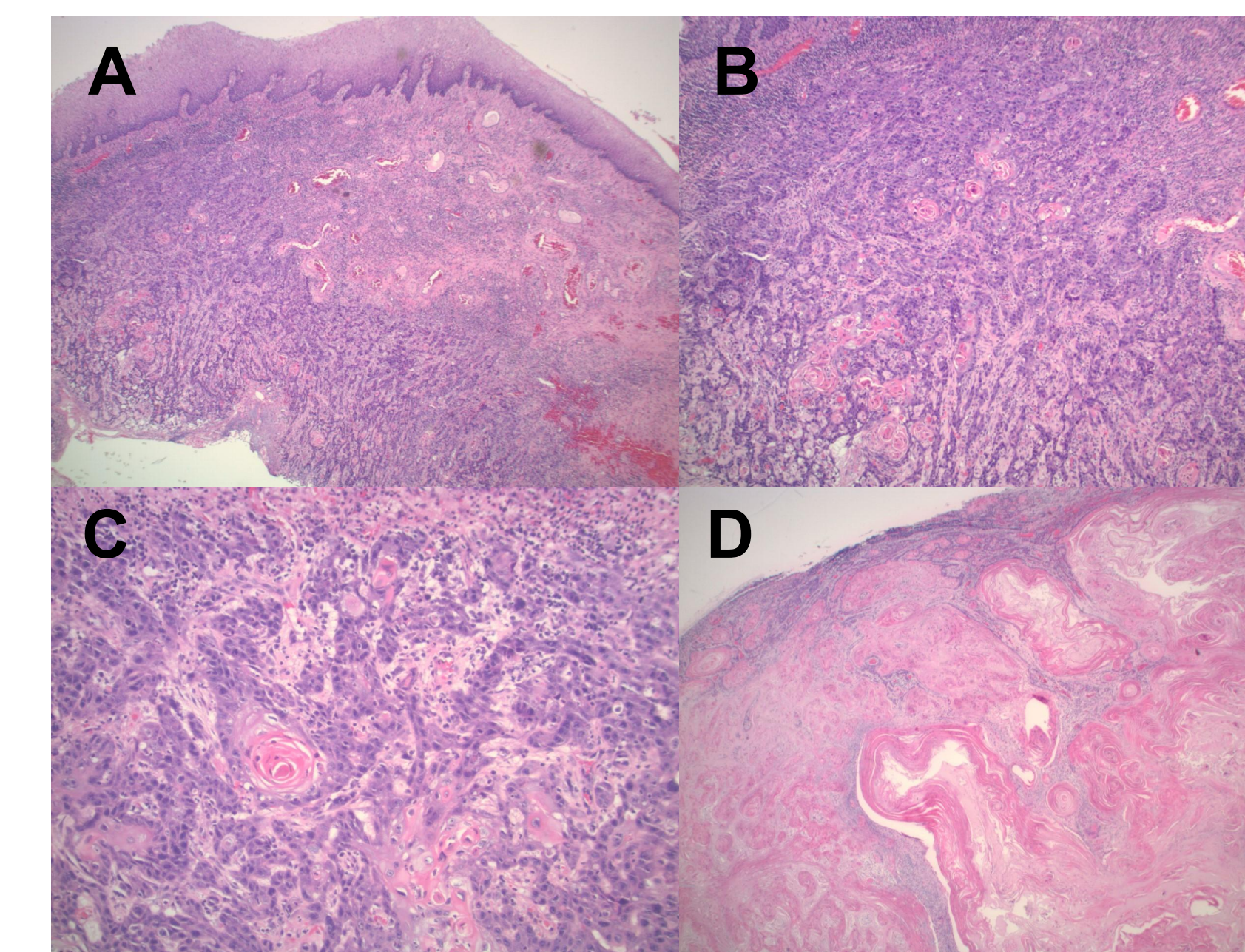


Figure 5: H&E stain of esophageal mass showing moderately differentiated SCC with associated desmoplastic stroma and focal ulceration (A, B, C). Invasion of LN (D)

Discussion

- Development of ESCC from a pharyngoesophageal diverticulum is a rare event with reports in the literature ranging from 0.3-7%
- Malignancy is thought to develop in part to chronic inflammation of the diverticulum
- High-risk patients include those with large ZD, advanced age and longstanding history of ZD, all of which were present with our patient
- A distinct worsening of dysphagia may indicate development of malignancy. Recurrence of ZD after a surgical or procedural intervention can be a warning sign for development of malignancy.

Conclusions

- Though uncommon, clinicians should be aware of the risk of ESCC developing from Zenker's diverticulum especially in patients who may have risk factors
- Clinical worsening of symptoms of ZD or recurrence of ZD despite a history of prior surgical or procedural intervention should be a red flag warning sign and prompt urgent endoscopic evaluation

References

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