

Supplementary Table 1. Varices Classification

Grade 1	Linear varices < 2 mm, reddish/blue, not raised on moderate insufflation, can be revealed by applying pressure with the endoscope
Grade 2	Blue, 2–3 mm, slightly tortuous, raised above the surface of the esophagus on moderate insufflation, sometimes also visible in the form of an “anterior sentinel vein”
Grade 3	Prominently elevated bluish veins, 3–4 mm, straight or tortuous, isolated distribution in the esophageal wall, “good mucosal coverage”
Grade 4	> 4 mm, circular extension around the esophageal wall; varices almost meet in the middle of the lumen; with or without “good mucosal coverage”
Grade 5	Racemose varices occluding the lumen, particularly marked with cherry red spots or varices on varices (“cherry red varices”)



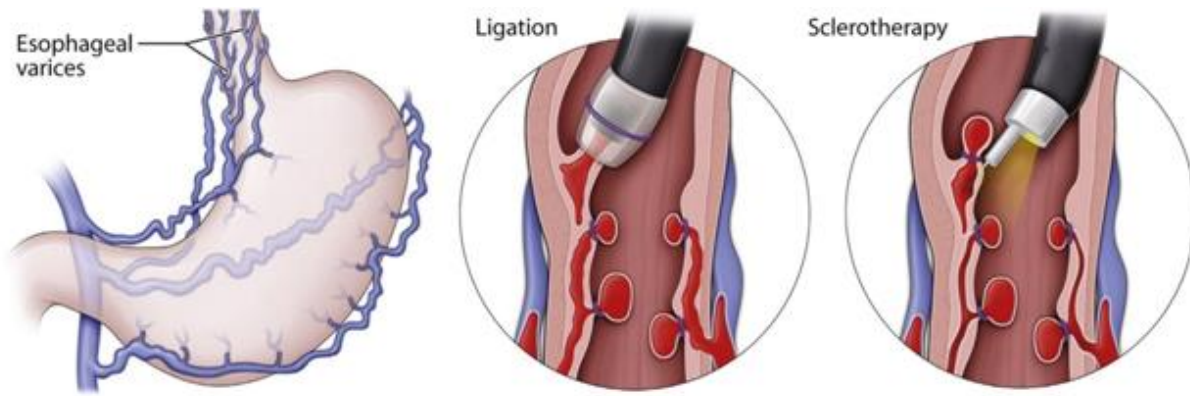
Supplementary Figure 1.



Supplementary Figure 2.



Supplementary Figure 3.



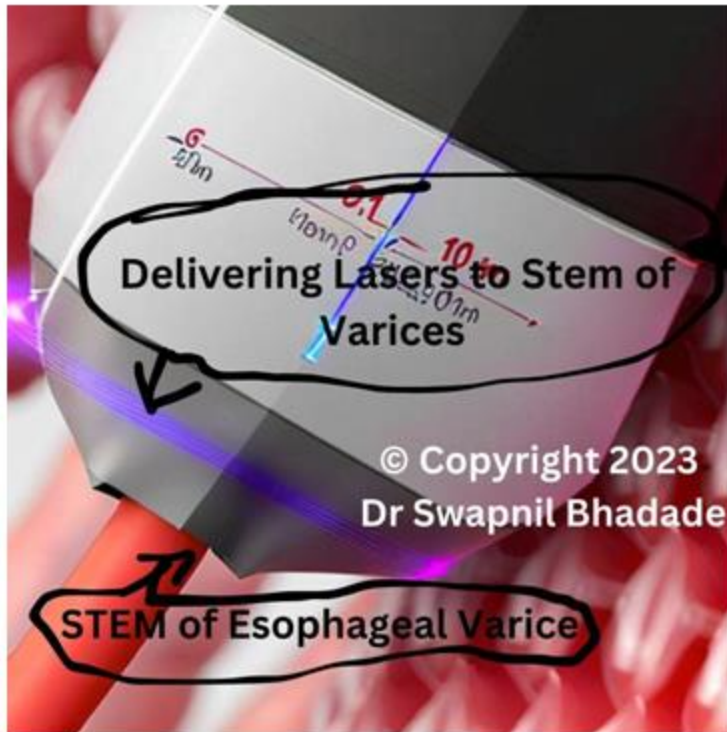
Supplementary Figure 4.



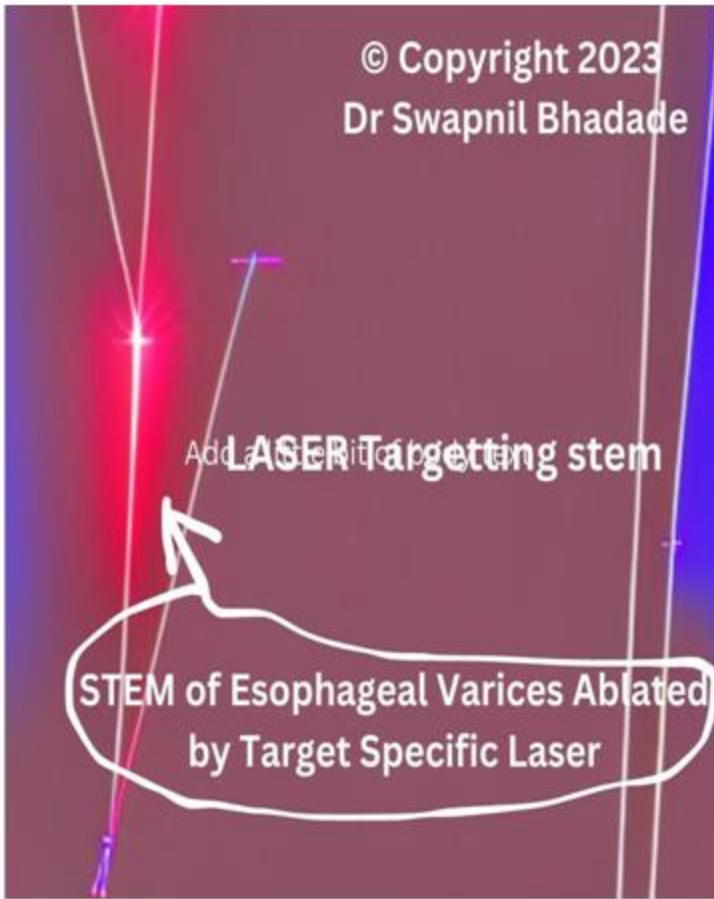
Supplementary Figure 5. Illustration depicting endoscopic probe probe outer elongated glass section measuring 10 centimetres (Ref image-05), specifically designed to provide clear visualisation of the varices stem.



Supplementary Figure 6. Illustration depicting tThis inner section features a rounded laser tip emitting focused laser energy that can be precisely directed at the varices stem.



Supplementary Figure 7. Illustration depicting the process of laser ablation of esophageal varices stem. Laser energy is selectively targeted at the varices, resulting in localised tissue destruction while sparing the surrounding healthy tissues.



Supplementary Figure 8 . Illustration Lasers Targeting Stem of Esophageal Varices



Supplementary Figure 9. Illustration depicting the process of laser ablation of esophageal varices stem. The stem tissue of esophageal varices is permanently ablated resulting in clotting of variceal head