An Autopsy Case of Esophageal Rupture Caused by Cardiopulmonary Resuscitation with the Insertion of a Sengstaken–Blakemore Tube

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Abstract：We encountered a case of an esophageal rupture, revealed by autopsy, that had possibly been caused by cardiac massage after a Sengstaken－Blakemore tube (SBT) insertion for gastric varicose vein rupture–induced cardiopulmonary arrest. ［Patient］A 54–year–old female with a gastric varicose vein rupture was brought to our facility, and received compression hemostasis using a SBT. Cardiopulmonary arrest occurred and cardiopulmonary resuscitation(CPR) was performed with the SBT in place. The patient died and an autopsy was performed about 13 hours after death. A full–thickness lacerated wound 7 cm in length was noted in the esophagus, and a lacerated wound 5.5 cm in length was noted in the gastric mucosa. ［Discussion］Esophageal injury occurs in many cases as a complication of improper use of SBT, such as a misplacement of a gastric balloon in the esophagus. In this patient, mucosal injuries were noted at the sites at which the gastric and esophageal balloons should have been placed, thus suggesting that the cause of esophageal injury was not due to improper placement, but was due to compression injury caused by cardiac massage with the balloon inflated. As a result, the balloons should be deflated when CPR is applied in patients with a SBT in place.

Key words：**Esophageal rupture, CPR, Sengstaken–Blakemore tube, Gastric varicose vein rupture**