

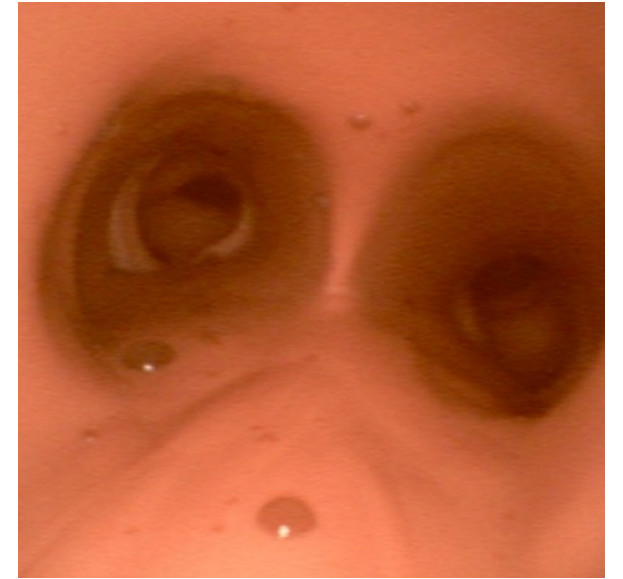
A**B****C**

Figure 1. Massive pulmonary hemorrhage (MPH) simulation. (A) Equipment is set-up in the operating room. The TruCorp AirSim Advanced Bronchi X manikin used in the model has an anatomically accurate internal respiratory tract. (B) The carina and main bronchi as seen on the portable monitor. To simulate MPH during the trial, (C) artificial blood is pumped into the base of the left bronchial tree at 600ml/hr. Vigorous pressure on the Ambu bag produces a cough, viewable via the QR code.