

Supplementary Document



Figure S1 Appearance of the experimental prototype



Figure S2 Six gastroscopes (GIF-Q260, Olympus, Japan) and two colonoscopes (CF-Q260AI, Olympus, Japan) to be disinfected in the experimental prototype

Note that the upper and lower GI endoscopes must be disinfected separately in the practical operation. Putting the gastroscopes and the colonoscopes together in the process of the autoptic experiment was done to test the disinfection efficiency of CD gas on different GI endoscopes with different lengths and inner diameter channels. All eight endoscopes treated with CD gas were reprocessed according to guidelines using an automated endoscope reprocessor (DSD-201, Medivator, USA) with OPA to ensure clinical safety

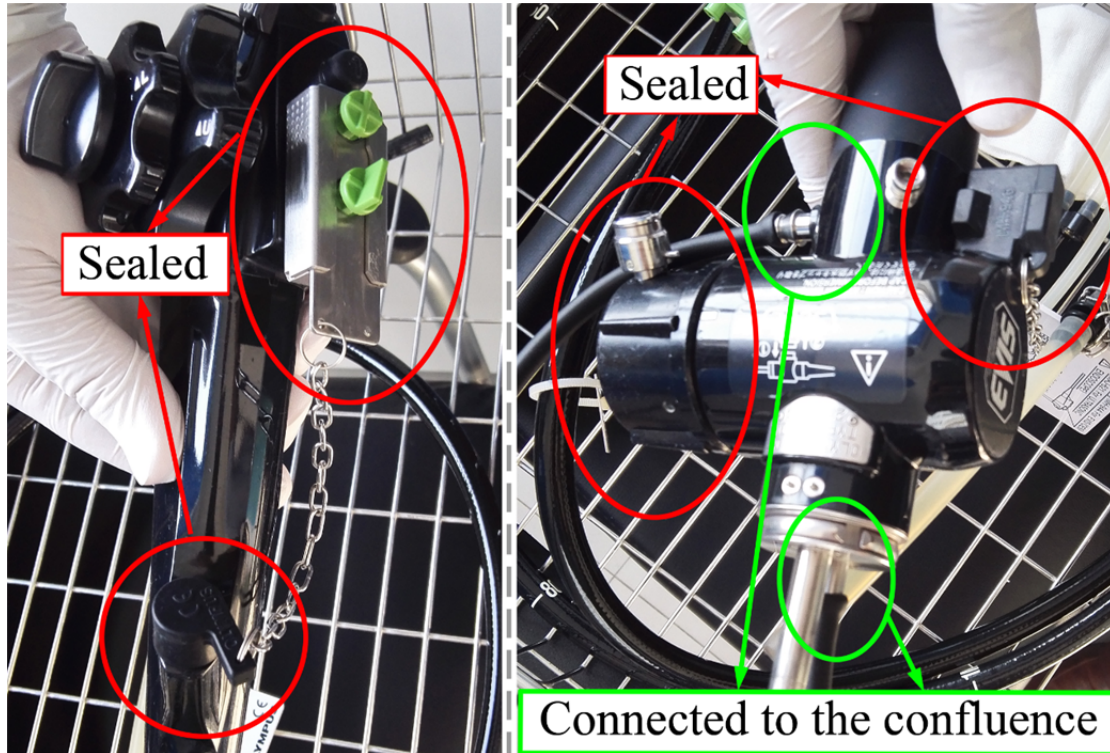


Figure S3 Methods to seal and connect the opening ports of the GI endoscope

The suction cylinder and air/water cylinder were sealed with a channel plug. The biopsy port was sealed with the biopsy valve. The electrical connector was sealed with a water-resistant cap. The air supply connector and water supply connector were sealed with an air/water connector cap. The suction connector and air pipe were connected to the branch connectors of the confluence