



Fluorescent-Image Guidance in Robotic Subtotal Gastrectomy

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ABSTRACT Robotic surgery technology has significant advantages, but its limitations include lack of tactile feedback. Fluorescent-imaging technology, part of the da Vinci robotic surgery system, helps to overcome this lack of feedback and improve safety. This video demonstrates the utility of fluorescent-image guidance in robotic subtotal gastrectomy. First, peritumoral injection of indocyanine green helps localize the primary lesion. Second, it enables visualization of sentinel lymphatic flow to guide the extent of lymph node dissection. Third, intravenous injection of indocyanine green confirms adequate tissue perfusion of the remnant stomach. Lastly, fluorescent angiography also visualizes the jejunal arterial arcade in the mesentery. In summary, we consider that fluorescent-image guidance may provide important intraoperative information that

supports techniques of robotic subtotal gastrectomy. Further studies to validate the benefits of fluorescent-image guidance are needed.

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