Redefining MRI:
From Image to Insight

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Chest

MS03-5

MR Application for Immediate Postoperative Complication Evaluation in Esophageal Cancer

Ho Yun Lee

Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

Esophageal surgery is the main therapy for esophageal cancer. Anastomotic leakage (AL) is a common complication, associated with increased morbidity, prolonged hospital stays, decreased quality of life, and increased mortality.

Diagnosis of AL is challenging, and no standardized diagnostic approach exists. Diagnostic tools include contrast swallow esophagography, endoscopy, computed tomography (CT), and drain amylase measurements. Esophagography is reliable and noninvasive but is prone to false negatives and aspiration risk. Endoscopy provides high specificity and direct examination of mucosal integrity but requires expertise and may not provide a complete view around the anastomosis. CT scans are safe and noninvasive for assessing the peri-anastomotic area and potential pulmonary complications; however, subtle mucosal changes may be missed, resulting in false negatives. Although the accuracy of amylase levels varies, drain amylase analysis is inexpensive and effective when combined with other techniques.

Based on our institutional experience, I will demonstrate the potential of magnetic resonance imaging (MRI) for achieving a precise diagnosis of complications occurring immediately after esophageal cancer surgery.

Keywords: *Esophagectomy, Anastomotic leakage, Magnetic resonance imaging*