Endoscopic mucosal resection: The new gold standard or the “Bitcoin” of the present

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When does a tool become a therapy? The article by Marino and colleagues,¹ “Esophagectomy versus endoscopic resection for patients with early-stage esophageal adenocarcinoma: a national cancer database propensity-matched study,” evaluating endoscopic mucosal resection (EMR) as an alternative to esophagectomy for the treatment of early esophageal cancer, provides yet another opportunity to ask the question “What is the current gold standard for the treatment for early-stage adenocarcinoma of the esophagus?”

The article attempts to answer this question using survival as the end point. It raises a number of issues related to our ability to successfully answer these questions with our current database-mining techniques. Although the ultimate outcome is survival, the detailed issues of patient selection and randomization, quality of life, postprocedural complications, types of procedures chosen in both groups, and crossover from the EMR to surgery remain unanswered.

The study demonstrates that initial survival is better with EMR, but long-term survival is better with esophagectomy. Is this initial benefit due to patient selection, operative technique, institutional expertise, or the lack of adequate preprocedural data, which may have affected outcomes?² More important is the long-term benefit of esophagectomy related to improper follow-up of patients who undergo EMR, improper use of EMR, or selection of patients who were denied esophagectomy in the first place and outlived their therapy. Unfortunately, we will never know because of the missing data from these types of database reports.

Another important issue with respect to the EMR data is that we do not know exactly what procedure was done: Were these mucosal resections or submucosal resections, the latter of which is the preferred method because of better diagnostic and therapeutic results.³ We do not know the follow-up of these patients with further resections, the level of surveillance after the procedure, or the long-term complications of these patients. Also, the details of the pathology specimens, one of the most important criteria for deciding

EMR versus esophagectomy: With so many unanswered questions, is it time to change the standard?

Central Message

The use of EMR as treatment for esophageal cancer rather than esophagectomy remains an acceptable alternative for early disease with major caveats for patients.

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which pathway to follow, are lacking in the study. It is important to know how many patients converted from the EMR group to the esophagectomy group because of higher stage after EMR than originally thought or those who came back for esophagectomy after EMR for recurrent disease at some point. We do know that these patients do just as well in some cases with proper follow-up even with a recurrence.⁴

One thing is clearly demonstrated by this study and review of the literature, and that is thoracic surgeons must be involved with these new techniques to allow for the patient to obtain the complete gamut of care when appropriate. If you can only perform EMR or only an esophagectomy, it is your only hammer, and consequently everything looks like a nail.

This article also demonstrates an important aspect of participating in meta-analysis studies, and that is a level of attention to detail and being compulsive. In addition, complete data collection is an absolute to allow clinical equipoise in determining a new gold standard; otherwise, meta-analysis is to analysis as to what metaphysics is to physics.

Although new and exciting, the technique of EMR remains to be accepted as the new standard and may be adopted by many as the current gold standard (including our group); however, until the lingering missing data points are provided, in my opinion it remains the Bitcoin of care.

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