Khalayleh et al\(^1\) have conducted a large cohort study to assess the rate of lymph node (LN) metastasis based on clinicopathological factors to establish an indication for middle segmental gastrectomy (MSG) as treatment for middle- and high-body T1 to T3 gastric cancers (GC). From the 701 patients included, Khalayleh et al\(^1\) observed an increased risk of LN metastasis to key LN stations in patients with tumor size 4.1 cm or larger (odds ratio [OR], 2.10; 95% CI, 1.20-3.67; \(P = .009\)), or poorly differentiated tumors (OR, 2.88; 95% CI, 1.45-5.73; \(P = .002\)). The study’s results demonstrated negligible rates of LN metastasis in LN stations 5 and 6, regardless of tumor size and differentiation. This suggests that dissection of LN stations 5 and 6 is not necessary in patients with middle- and high-body tumors with a size of 4 cm or smaller. The authors concluded that MSG is feasible for high-body and middle-body GC 4 cm or smaller and cT1N0/1M0 stages and well-differentiated cT2N0/1M0 stages.

The prognostic importance of metastatic LN in GC has been illustrated in several studies,\(^2\) and as such, conventional gastrectomy with D2 lymph node dissection has been considered the surgical procedure of choice.\(^3\) However, conventional gastrectomy still has substantial morbidity and there is increased interest in less invasive techniques. MSG is not a procedure commonly performed in western countries but is more popular in eastern countries where there is a higher rate of GC and where there may be an increased percentage of early GC diagnosed. One of the obstacles to the broader application of MSG has been the concern about regional metastatic disease, and the study by Khalayleh and colleagues\(^1\) has provided valuable insight into the metastatic load in the various lymph node stations. In early reports, it does appear that MSG is accompanied by decreased morbidity and specifically a reduction in early dumping syndrome and reflux gastritis symptoms.\(^4\)

Additionally, this study by Khalayleh et al\(^1\) will help to inform decision-making in other minimally invasive treatments of GC, such as endoscopic mucosal resection (EMR) of early GC. At the current time, this technique is limited to very early GC because of concern about LN metastatic disease. In the past, traditional gastrectomy was also recommended for poorly differentiated cancer because of the perceived increased risk of LN disease which now appears not to be the case.\(^5\) As our understanding of the behavior of LN metastatic disease in GC increases, it is likely that the indications for EMR will continue to broaden. This is likely to be assisted by other staging techniques such as sentinel node tracing and endoscopic injection techniques that will complement the preoperative and operative staging of GC.\(^6\) Preoperative pathological staging methods of gastric cancer, particularly early gastric cancer, can differ across institutions as regards to paraffin section thickness or use of immunohistochemistry. Thus, the pathological stage of GC may be underestimated with subsequent higher rates of LN metastasis. Expanded indications of limited gastrectomy will require accurate and standardized histological staging to ensure optimal curative approach. Clearly, the oncological safety of less invasive treatments of GC will have to be assessed in large trials.

It is certain that the treatment of GC will change substantially in the decades to come and will, hopefully, be less morbid and more effective for our patients. This study by Khalayleh et al\(^1\) is a valuable addition to our current knowledge of the patterns and rate of LN metastasis in GC and has provided a useful signpost in the selection of patients for minimally invasive gastrectomy and may help us to develop more robust indications for EMR.
REFERENCES


