Editorial

cT2N0 esophageal cancer remains a difficult diagnosis

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Esophageal cancer treatment is based on the extent of disease. Early stage clinical T1N0 tumors are treated either endoscopically or with surgical resection primarily. Advanced disease T3 or above or any nodal disease is recommended to undergo neoadjuvant upfront treatment followed by surgical resection. However, the T2N0 clinical stage tumor seems to straddle these recommendations. This is partly due to the lack of accuracy in our staging capability. Endoscopic ultrasound (EUS) is generally regarded as the gold standard for local regional staging. However multiple clinical trials and retrospective analysis demonstrates that 30–40% of patients staged T2N0 are either under staged or over stage with only about 25% accurately stage (1,2). This makes providing accurate treatment recommendations for a clinical T2N0 quite difficult. Approximately 25–55% of primarily resected specimens demonstrate node positivity. Given that node positive disease is associated with decreased survival, many centers have recommended upfront neoadjuvant treatment in this population. However, several studies have demonstrated that despite 40–50% of patients being upstaged at the time of primary surgical therapy, overall survival remains unchanged compared to those who obtain neoadjuvant treatment. Speicher *et al.* evaluated in the national cancer database of almost 5,000 clinical T2N0 patients (3) that only 27% of patients who underwent primary resection had accurate staging. Forty-two percent of patients were upstaged following surgery. Despite this, the overall cohort of patients who underwent primary surgical therapy had no significant difference in long-term survival compared to those who underwent neoadjuvant treatment followed by surgery. Likewise a meta-analysis by Mota *et al.* demonstrated no benefit to neoadjuvant treatment compared to upfront surgery (4). Markar *et al.* published a multicentered retrospective analysis of 30 European centers that also demonstrated no survival benefit to upfront neoadjuvant chemoradiotherapy treatment (5). They did find increase tumor downstaging and stage 0 resections. However, there was no difference in in-hospital mortality, total morbidity, complications or 5 years survival. There was no difference in local, regional or distant metastases. And the effect was the same whether it was squamous cell cancer or adenocarcinoma. An attempt to get a general consensus among international experts concerning the treatment algorithm for a clinical T2N0 tumor only yielded an agreement that that nodal staging was highly unreliable with a slight favor for perioperative chemotherapy in addition to surgery (6). Semenkovich *et al.* attempts to clarify the ambiguity of clinical T2N0 by developing a decision tree that would increase the likelihood that we would be treating node-positive disease with upfront chemoradiotherapy (1). They recommend that tumors with grade 3–4 disease, tumors greater than 3 cm in size, and the presence of lymphovascular invasion should prompt use of upfront chemoradiotherapy treatment versus primary surgical resection. These factors may improve the efficacy of upfront treatment by targeting those patients who truly have more advanced disease. However, what we really need is better staging modalities. It is clear that the current ultrasound technology does not provide the accuracy necessary for proper identification of

tumor burden. Positron emission tomography/computed tomography (PET/CT) scans are limited for local regional disease even though some have used FDG uptake as an indicator of disease burden. Tumor characteristics and molecular signatures may ultimately prove to be a better indicator of the biology of the tumor rather than anatomical considerations. Until then, studies such as Semenkovich *et al.* will help improve the likelihood of treating the correct population with the proper treatment.

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Footnote

Conflicts of Interest: The author has no conflicts of interest to declare.

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