Ann Surg Oncol (2019) 26:4244–4245
https://doi.org/10.1245/s10434-019-07890-y

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

ASO AUTHOR REFLECTIONS

ASO Author Reflections: A Negative Axillary Clinical Exam Adequately Identifies Clinically Node-Positive Patients who Downstage After NAC and are Candidates for SLNB

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PAST

Sentinel lymph node biopsy (SLNB) after neoadjuvant chemotherapy (NAC) in clinically node-positive patients is a newer approach to axillary management endorsed by the National Comprehensive Cancer Network (NCCN).[1] Among patients with a negative axillary clinical examination after NAC, there is no consensus on the most accurate, cost-effective approach to select those who are eligible for SLNB. Magnetic resonance imaging (MRI) and ultrasound (US) are the imaging modalities most frequently used after NAC. US assessment of the axilla shows an accuracy of 62–65% in determining the pathologic status of axillary nodes after NAC,[2,3] with 28% of patients potentially undergoing an unnecessary procedure if suspicious US findings are used to assign them to axillary dissection.[4] The accuracy of MRI in predicting the status of the sentinel lymph nodes in clinically node-positive patients with a negative axillary clinical exam after NAC has not been studied.

PRESENT

Our study examined the accuracy of axillary clinical exam alone versus clinical exam combined with MRI in predicting the presence of residual axillary disease in cN1 patients after NAC.[5] We found that the addition of MRI to a negative clinical examination did not significantly improve prediction of the pathologic status of sentinel nodes after NAC, with an accuracy of 58%. In patients with a negative clinical examination, there was no difference in the frequency of positive sentinel nodes on final pathology based on whether patients had clinical examination alone (52%), a positive MRI finding (58%), or a negative MRI finding (42%; $p = 0.09$). The use of abnormal findings on MRI to assign patients to axillary dissection would have resulted in 42% of patients undergoing an unnecessary procedure.

FUTURE

The adoption of SLNB in patients with clinically positive lymph nodes who downstage after NAC has spared many the morbidity of an axillary dissection. However, consensus on how to best select patients who are candidates for SLNB after NAC is needed. Our findings indicate that in patients with a negative axillary clinical exam, MRI after NAC does not provide useful information for axillary management. This study, taken together with those on US use in the post-NAC setting, highlights the limited accuracy of both imaging modalities. If patients are assigned to axillary dissection based on suspicious imaging findings, then a large number would potentially undergo an unnecessary procedure. Perhaps a negative axillary clinical exam after NAC should be used as the "gold standard" to select patients who downstage for SLNB.

ASO Author Reflections is a brief invited commentary on the article, Is Clinical Exam of the Axilla Sufficient to Select Node-Positive Patients Who Downstage After NAC for SLNB? A Comparison of the Accuracy of Clinical Exam Versus MRI. *Ann Surg Oncol.* 2019. https://doi.org/10.1245/s10434-019-07867-x.

First Received: 19 September 2019;
Published Online: 15 October 2019

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DISCLOSURE Dr. Monica Morrow has received speaking honoraria from Genomic Health and Roche.

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