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COMMENTARY

Sentinel Node Mapping at the Time of COVID-19 Outbreak

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Breast cancer is the most common malignancy in women, with more than 275,000 newly diagnosed cases discovered every year, in the United States. Breast cancer accounts for about 30% of cancers among females.[1] Although the prognosis of patients affected by the early-stage disease is excellent, patients with tumors spreading outside of the breast and to regional lymph nodes decreased dramatically.[2]

At the time of diagnosis, tumor size and lymphatic dissemination are the most important prognostic factor in breast cancer patients.[3] Determining the presence of cancer cells in the regional lymph nodes is essential from a prognostic and therapeutic point of view, since identifying the extra-mammary disease is important to tailor postoperative treatments and scheduling adequate surveillance.[4] Sentinel lymph node biopsy has replaced axillary lymphadenectomy in staging the axilla.[5] Sentinel node mapping aims to remove the first lymph node(s) to which a tumor is likely to spread. Level A evidence highlighted that patients having sentinel node mapping had similar 5-year outcomes than patients having full dissection.[5] Several techniques for the identification of sentinel nodes have been studied and implemented.[6,7]

The current ongoing COVID-19 outbreak is changing our practice as COVID-19 threatens to curtail patient access to evidence-based treatment.[8–14] Reducing the in-hospital risk of COVID-19 transmission is a priority. In the paper published in this *issue,*[15] the authors evaluated the impact of not performing delayed lymphoscintigraphic images for minimizing the in-hospital waiting time. The authors compared outcomes of 74 and 73 patients managed before and during the COVID-19 outbreak, respectively. All patients underwent sentinel node mapping for early-stage breast cancer: the 74 patients having treatments before the pandemic had lymphoscintigraphy with the evaluation of both the early and delayed images, while the 73 patients having treatment during the pandemic had early images only. Sentinel nodes were more likely to be detected in patients having both early and late images available, although there was not a statistically significant difference. Owing to the failure of sentinel node identification, axillary dissection was performed in two (2.7%) and seven (9.6%) patients in the pre-pandemic and pandemic period, respectively.[15] Authors discuss that the percentage of sentinel node identification might have been higher if delayed images could have been taken, therefore performing fewer axillary dissections. The paper raises a question on the consequences of shortening the in-hospital waiting time, when reducing this time could potentially have an impact on the standard of care of axillary staging.

Recently published recommendations on managing cancer patients during COVID 19 pandemic mostly focus on prioritization and optimization of treatments for these patients based on breast cancer type and preoperative staging.[8–14] Future studies will have to evaluate their overall impact on clinical outcomes.

Nonetheless, the execution of axillary dissection correlates with worse Quality of Life and overall patients outcomes.[16] It increases operative time, length of hospital stay, and the risk of developing postoperative morbidity.[17] All those represent critical features during the COVID-19 pandemic. Reducing hospital stay, improving postoperative recovery, and promoting early discharge have a crucial role. Additionally, from this point of view, the adoption of Enhanced Recovery After Surgery (ERAS) would improve the outcomes of patients having surgery and their postoperative recovery for breast cancer patients[18] as reported for other malignancies.[19] Further efforts are necessary to improve the outcomes of cancer patients during the COVID-19 outbreak.

Disclosure statement

No potential conflict of interests was reported by the author(s).

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