



ASO Author Reflections: Malignant Chest Wall Tumors: Chasing the Challenges

Jyoti Sharma, MCh, S. V. S. Deo, MS, Sunil Kumar, MS, Sandeep Bhoariwal, MCh, Naveen Kumar, MCh, Jyotishman Saikia, MCh, Sushma Bhatnagar, MD, Seema Mishra, MD, Sachidanand Bharti, MD, Sanjay Thulkar, MD, D. N. Sharma, MD, and Sameer Bakhshi, DM

All India Institute of Medical Sciences, New Delhi, India

PAST

Management of malignant chest wall tumors is challenging because of their rarity, pathologic heterogeneity, involvement of critical anatomic structures, and treatment by multiple surgical disciplines.¹ Presentation with a locally advanced stage of disease and limitation of reconstruction options make it further difficult in low-middle-income countries. The role of a multidisciplinary approach with surgery as the cornerstone has been reported, mainly for primary chest wall sarcomas.^{2,3}

PRESENT

This report elaborates on the clinicopathologic profile and surgical treatment of 181 malignant chest wall tumors. It shows that good oncologic outcomes can be achieved, even with secondary chest wall tumors. Well-planned muscle-sparing incisions, defect analysis, and adherence to principles of reconstruction can optimally restore chest wall function after complex resections. The surgical oncologists in this study preferred to use the pedicled myocutaneous flaps and bone cement-synthetic mesh sandwich technique for the

majority of reconstructions. The study provides an algorithm for the rigid and pliable reconstruction of chest wall defects.⁴

FUTURE

The spectrum of malignant chest wall tumors for cure may widen with advances in chemotherapy and immunotherapy, radiation techniques, anesthesia, and pain management. The surgical treatment may become more radical and less morbid with the use of artificial intelligence in preoperative three-dimensional planning and custom-made prostheses.⁵ Research needs to be focused on developing low-cost and easily processable chest wall prostheses.

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S. V. S. Deo, MS
e-mail: svdeo@yahoo.co.in

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