

Musculoskeletal Oncology: Finding Its Place in the Sun!

The Congressman from California, Jeff Denham, while speaking on principles of immigration reforms said “I expect if you are going to come out of the shadows, then you’re going to want to have some type of hope in the future that you’re going to improve your life and yes, accomplish that American Dream.” This can easily be rephrased vis-a-vis musculoskeletal oncology to read as “I expect if you are going to come out of the shadows, then you’re going to want to have some type of hope in the future that you’re going to improve lives and yes, accomplish that dream.”

When I started practising musculoskeletal oncology almost two decades ago, it was a speciality that was largely in the shadows, especially in India, with limited awareness and very few practitioners. Today, it is starting to find its place in the sun, being recognized as a distinct orthopedic subspecialty with a society of its own (Indian MusculoSkeletal Oncology Society - IMSOS) and an oncology session in almost every regional and state conference.

This symposium volume bears testimony to the fact that today we have many more orthopedic surgeons practising the science and art of musculoskeletal oncology. We had more submissions than we could accommodate in this volume giving credence to the belief that, “Yes, we have come out of the shadows, there is hope in the future, we are improving lives and accomplishing that dream.”

In this volume, we have articles from various centers across India and the globe that cover a wide range of topics in musculoskeletal oncology—benign and malignant bone tumors, pelvic tumors, soft-tissue sarcomas, metastatic bone disease, newer tools such as navigation-assisted tumor surgery, surveillance strategies in sarcomas and the issues that confront long term pediatric sarcoma survivors.

This symposium includes articles that focus on reconstruction and function after surgery in specific anatomic areas such as the fibula, distal end of the radius, and the head of the femur. An interesting study by Sabrina *et al.*¹ examines the significance of RANKL expression as a prognostic marker in predicting the risk of local recurrence in giant cell tumors while Kundu *et al.*² explores the role of Zoledronic acid as an adjuvant in the management of giant cell tumor and its potential in reducing the risk of local recurrence.

Singh and colleagues^{3,4} demonstrate the effectiveness of distal femoral canal decompression in reducing the risk of cardiopulmonary events in patients with metastatic bone disease of the proximal femur when using long stem cemented hip replacement and use gait analysis techniques

to objectively conclude that limb salvage surgery with endoprosthesis reconstruction around the knee gives good functional outcomes.

The group from Tata Memorial Hospital sheds light on the role of postoperative radiotherapy on outcomes after adequate resection in Ewing’s sarcoma of the pelvis⁵ while Sukumaran *et al.*⁶ share their experience in managing pediatric osteosarcoma patients from a center in south India.

“Whether less intensive surveillance protocols would affect sarcoma patient survival” was recently identified as the highest-ranking research priority in the field of orthopedic oncology by an international expert panel.⁷ The article by George *et al.*⁸ investigates the effectiveness of their followup imaging protocol to determine if earlier detection may have been possible had more intensive imaging been undertaken and its potential effect on outcomes.

The article by Weiss and Zimel⁹ focuses on the long term issues of pediatric sarcoma survivors and the effects of the therapy they received. What gives this article a unique perspective is that it is penned by two musculoskeletal oncologists who themselves are sarcoma survivors.

Review articles on soft-tissue sarcoma management and the applications of navigation surgery in musculoskeletal oncology will help the readers update their knowledge on the current practices prevalent in these areas.¹⁰

No man (or woman) is an island; effective musculoskeletal oncology cannot be practised by a surgeon in isolation. The need for multidisciplinary care and inputs from allied colleagues forms the cornerstone of providing the best possible results in this challenging speciality.¹¹ Cancer care is the new buzz word in the field of medicine and we are seeing a transformational change as to how cancer is perceived and treated. The promise offered by progress made in unraveling the genetic predisposition of certain sarcomas, newer diagnostic modalities, and path-breaking novel treatment regimens offers renewed hope in what was earlier considered a relatively unattractive and not so gratifying career option.¹² An effort to increase the access to affordable quality cancer care is evident with the government taking the initiative to set up oncology centers across the country.^{13,14} Private philanthropic organizations are also contributing to this initiative.¹⁴ Sustaining this endeavor will necessitate many more appropriately trained oncologists with the potential for rewarding and gratifying career opportunities. This will need to be coupled with creating increased awareness about this field beginning with the undergraduate teaching curriculum to sustained attempts at reinforcing these principles among practicing colleagues.

Although musculoskeletal oncology is starting to enjoy its moment in the sun, to echo Robert Frost “we have promises to keep, and miles to go before we sleep”. This symposium volume will help in highlighting the strides that have been made in the last few decades and create awareness of the potential that exists in this subspecialty.

Ajay Puri

Department of Surgical Oncology, Tata Memorial Hospital, HBNI, Mumbai, Maharashtra, India

Address for correspondence:

*Prof. Ajay Puri,
Department of Surgical Oncology, Room No: 45,
Tata Memorial Hospital, HBNI, Mumbai, Maharashtra, India.
E-mail: docpuri@gmail.com*

References

1. Sabrina AG, Wan Faisham WI, Md. Salleh MS, Sahran Y, Zawawi MS. The values of receptor activator nuclear kappa-B ligand expression in Stage III giant cell tumor of the bone. *Indian J Orthop* 2017;52:31-4.
2. Kundu ZS, Sen R, Dhiman A, Sharma P, Siwach R, Rana P. Effect of intravenous zoledronic acid on histopathology and recurrence after extended curettage in giant cell tumors of bone: A comparative prospective study. *Indian J Orthop* 2017;52:45-50.
3. Singh VA, Sarrafan S, Veriah RS. Distal medullary canal decompression in long stem hip replacement in long bone metastases: Does it reduce cardiopulmonary complications? *Indian J Orthop* 2017;52:15-21.
4. Singh VA, Heng CW, Yasin NF. Gait analysis in patients with wide resection and endoprosthesis replacement around the knee. *Indian J Orthop* 2017;52:65-72.
5. Puri A, Gulia, Crasto S, Vora T, Khanna N, Laskar S. Does radiotherapy after surgery affect outcomes in Ewing’s sarcoma of the pelvis? *Indian J Orthop* 2017;52:73-6.
6. Sukumaran RK, Rajeshwari B, Sugath S, Chellappan SG, Thankamony P, Parukuttyamma K. Methotrexate free chemotherapy and limb salvage surgery for paediatric osteosarcoma in India. *Indian J Orthop* 2017;52:58-64.
7. Schneider PJ, Evaniew N, McKay P, Ghert M. Moving forward through consensus: A Modified Delphi approach to determine the top research priorities in orthopaedic oncology. *Clin Orthop Relat Res* 2017;475:3044-55.
8. George A, Grimer RJ, James SL. Could routine magnetic resonance imaging detect local recurrence of musculoskeletal sarcomas earlier? A cost-effectiveness study. *Indian J Orthop* 2017;52:81-6.
9. Weiss KR, Zimel MN. Considerations for the long term treatment of pediatric sarcoma survivors. *Indian J Orthop* 2017;52:77-80.
10. Vodanovich DA, Choong PF. Soft-tissue sarcomas. *Indian J Orthop* 2017;52:35-44.
11. Blay JY, Soibinet P, Penel N, Bompas E, Duffaud F, Stoeckle E, *et al.* Improved survival using specialized multidisciplinary board in sarcoma patients. *Ann Oncol* 2017;28:2852-9.
12. Ballinger ML, Goode DL, Ray-Coquard I, James PA, Mitchell G, Niedermayr E, *et al.* Monogenic and polygenic determinants of sarcoma risk: An international genetic study. *Lancet Oncol* 2016;17:1261-71.
13. India News, Government to Set Up 49 Cancer Centres in 3 Years – Times of India. Available from: <https://www.timesofindia.indiatimes.com/india/govt-to-set-up-49-cancer-centres-in-3-yrs/articleshow/60725429.cms>. [Last accessed on 2017 Sep 18].
14. Maharashtra Government Links Up State Medical Colleges for Cancer Care, Education & Training – Tata Trusts. Available from: <http://www.tatatrusts.org/article/inside/maharashtra-government-links-up-state-medical-colleges-for-cancer-care-education-and-training>. [Last accessed on 2017 Nov 01].

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code: 	Website: www.ijoonline.com
	DOI: 10.4103/ortho.IJOrtho_674_17

How to cite this article: Puri A. Musculoskeletal oncology: Finding its place in the sun!. *Indian J Orthop* 2018;52:1-2.