

OncoMedia will focus on News and Event related to Bone and Soft Tissue Tumors from all across the World. Specific focus will be Industry updates, New Research, Social Impact of tumors, Basic Science and developments in cytogenetics and allied fields. In short OncoMedia is a place for most interesting read in this entire issue :)

Indian Musculo Skeletal Oncology Society (IMSOS)

Musculoskeletal oncology is a relatively new specialty, both as far as orthopaedics and oncology goes. For sarcoma care to evolve, ideas to surface and multi institute or multi disciplinary collaborations to develop in the fields of basic research, patient care, biomaterials and prosthesis, there is a need for a common platform where all of us involved in the treatment of sarcomas can interact. This would also

help foster training and education opportunities, promote dissemination of knowledge and aid in the development of treatment guidelines suitable for our socio cultural environment. As the field of musculoskeletal oncology continues to develop globally and in India, it is time for us to reflect on what is required for it to grow further so that we are able to offer the best care to the maximum number of patients.

The Indian Musculo Skeletal Oncology Society (IMSOS) is a step in this direction. It aims to “promote scientific, evidence based, comprehensive multidisciplinary management of bone and soft tissue sarcomas and encourage basic and clinical research.” In the words of Henry Ford “Coming together is a beginning; keeping together is progress; working together is success”.

The Indian Musculoskeletal Oncology Society 1st Annual

Conference was organised on 13th and 14th March, 2015 at the Tata Memorial Hospital, Mumbai.

The theme of the conference was “Cure, control or comfort – In tumors teamwork triumphs!” reflects the ethos of IMSOS of bringing together all specialties

interested in sarcoma care to interact on a continuous basis and help further advances in



Dr Ashish Gulia¹ & Dr Ashok Shyam^{2,3} compiled the OncoMedia section for this issue of Journal of Bone and Soft Tissue Tumors

musculoskeletal oncology. The second meeting is planned in Cochin in 2016.

Visit www.imsos.org for more information.

Bone marrow as a metastatic niche for disseminated tumor cells from solid tumors

Tissue specificity of tumor cells to metastasize, for example predilection of lung carcinoma to spread to bone, is still poorly understood. It is believed that the tumor cells with seed into tissues that act as good soil for them to grow. In this respect bone marrow is said to be the metastatic niche for seeding and growth of variety of tumors. The tumor cells mimic the homeopoietic stem cells and capture the niche for themselves through series of complex steps involving cytokines, adhesion molecules and



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physical factors. The detailed mechanism still eludes us but we do grasp the importance of this phenomenon. This colonisation may play an important role in cases that relapse after chemotherapy. In these cases the tumor cells may find safe haven in the bone marrow niche and can emerge later to cause further metastasis and disease spread. Understanding of these mechanisms will help in developing effective chemotherapeutic solutions and may allow to restrict the disease for spreading too. Recent article published in BoneKey¹ elaborates on the function of metastatic niche and provides insight into new developments to tackle this. But we are still far away from any clinical implication of the theory.

1. Shiozawa Y, Eber MR, Berry JE, Taichman RS. Bone marrow as a metastatic niche For disseminated tumor cells from solid tumors. Bonekey Rep. 2015 May 20;4:689 Osteoclasts cause muscle weakness and bone pain in bone tumors Osteoclasts cause muscle weakness and bone pain in bone tumors.

Osteoclasts cause muscle weakness and bone pain in bone tumors

Understanding the basic mechanisms by which tumors cause certain systemic symptoms will help in understanding and planning therapeutic strategies. Tumor cells stimulate osteoclastic activity which lead to outpour of excess of bone derived growth factor. The bone derived growth factors have direct effect on the muscles and cause muscle weakness as well as muscle wasting. It is believed that in this muscle-bone synergy it's the muscle that is a more powerful secretory gland and has strong influence on bone homeostasis. However in cases with bone tumor this relationship is reversed and also distorted leading to muscle wasting. Most important factor is TGF-beta family of 'osteokines'. These may cause reduction in both muscle mass as well as muscle function. The weak bones add to the impaired function. The same hyperactive osteoblasts create an acidic environment in the bone which is directly related to severity of bone pains. Two good articles clear a lot of confusion and provide fresh insights into the subject [1,2].

1. Waning DL, Guise TA. Cancer-associated muscle weakness: What's bone got to do with it? Bonekey Rep. 2015 May 20;4:691.
2. Nagae M, Hiraga T, Yoneda T. Acidic microenvironment created by osteoclasts Causes bone pain associated with tumor colonization. J Bone Miner Metab. 2007;25(2):99-104.

Hair Bucket Challenge' helping Sherwood boy with Ewing's Sarcoma

Social impact of bone tumors are not unknown but this is unique. We all know about the ice bucket challenge, but a hair bucket challenge is unheard of. This was created for fourth-grader Tony Budesilich, who was recently diagnosed with Ewing sarcoma, a rare bone cancer in his leg (fibula which was surgically excised). The boy underwent seven rounds of chemotherapy and started losing hair. His friends noticed this change specifically Aidan Cook (12 yrs) who shaved his head and thus started a challenge the other boys to shave their head. This became an internet sensation and lot of kids [not only friends of Tony] from the locality participated and we could see a lot of shaved heads in Sherwoods.

Tony has been given a good prognosis but has to continue the complete course of chemotherapy, but he definitely feels great about how his friends and family have supported him in a very difficult phase of his life

Read more:
<http://www.kptv.com/story/29109392/hair-bucket-challenge-helping-sherwood-boy-with-rare-bone-cancer#ixzz3d8e4tHuP>



Join the OncoMedia Team and keep the interesting news coming through. We invite trainees of all faculties involved in care of bone and soft tissue tumors to become a part of this active and dynamic team. They will be required to search the web and find interesting news and facts (which we will otherwise miss) and send it to the editorial board. A short original write up will be necessary for the same. If accepted your news article will be published with your photograph and affiliation. To be a part of OncoMedia please write an email to us at editor.jbst@gmail.com