EXTRANODAL NON-HODGKIN'S LYMPHOMA OF THE PARAPHARYNGEAL SPACE

Sir,

A 40-year-old male presented with diminished hearing, occasional tinnitus and intermittent pain in the right ear of two-year duration that was gradually increasing. Intraoral examination revealed a large right parotidomeal bulge pushing the entire tonsil towards the midline, which was normal on palpation. Parotid gland was normal and there was no appreciable cervical lymphadenopathy. Computed tomogram scan revealed a right parapharyngeal space (PPS) mass involving the nasopharynx and oropharynx. [Figure 1] The medial and lateral pterygoid plates were eroded and minimal infratemporal fossa infiltration was present. Magnetic resonance imaging revealed a large lobulated hyperintense mass on time (T) 2 weighted images in the PPS extending from the skull base to the level of the mandible. [Figure 2] Fine needle aspiration cytology (FNAC) was inconclusive. On exploring the PPS a diffuse mass filled the entire PPS with indistinct planes with the adjoining structures. The palatine tonsils however appeared separate from the mass. A biopsy of the mass was performed which on frozen section examination was suspicious of a low-grade lymphoma and hence further excision was not performed. The final histology revealed atypical lymphoid cells forming nodules and involving the parapharyngeal muscles and soft tissues. [Figure 3] The cells were CD20 and Bcl2 positive and CD43, CD3, CD5, CD23, CD10 negative. Based on the immunohistochemistry and morphology a diagnosis of extranodal marginal zone NHL was made. After relevant staging investigations patient was grouped as stage II EA and received six cycles of adriamycin, cyclophosphamide, vincristine and prednisolone (CHOP) chemotherapy, followed by radiotherapy (46 Gray in 23 fractions over 32 days). At two-year follow-up the patient is asymptomatic and was controlled clinically.

Only 10% of patients with NHL present with extranodal disease in the HN sites. Primary malignant lymphomas of the PPS are rare and reported in the literature as isolated case reports or part of larger series of parapharyngeal space tumors. These extranodal NHL are predominantly B-lymphocyte origin and only 11% are low grade. Distinction of lymphomas from carcinomas and other cancers of the head and neck are critical in designing treatment. There are no pathognomonic radiological features of PPS lymphoma however imaging is useful in excluding other common tumours of the

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Souvik Mitra*, Sujit Basu**

*Final Year Medical Student, Medical College Calcutta, 88 College Street, Kolkata - 700012, India
**Department of Medical Oncology, Chittaranjan National Cancer Institute, 37 S. P. Mukherjee Road, Kolkata - 700 026, India

Correspondence
Dr. Sujit Basu
618, Block "O", New Alipore, Kolkata - 700053, India. E-mail: basujit@yahoo.com
Stem cells are the cells that have the ability to divide for indefinite periods in culture and to give rise to specialized cells. Sources of these cells include embryo, umbilical cord and certain sites in adults such as the central nervous system (CNS) and bone marrow. Its use hold promise of widespread applications particularly in areas of spinal cord injury, difficult non-unions, critical bone defects, spinal fusions, augmentation of ligament reconstructions, cartilage repair and degenerative disc disorders. This review article contains current information derived from Medline searches on the use in various orthopedic subspecialties. Some issues remain at the forefront of the controversy involving stem cell research - legislation, ethics and public opinion, cost and concentration methods. As is true with any new technology, the enthusiasm for this technology that has potential to influence virtually every orthopedic case management, must be balanced by subjecting it to stringent clinical and basic research investigations.

Key words: Stem cells, spinal cord regeneration, non-union, cartilage repair.

REFERENCES


