Retrospective analysis of total skin electron beam radiation therapy in cutaneous t-cell lymphoma- A developing nation experience

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Introduction: Total Skin Electron beam Therapy (TSET) is an effective therapeutic strategy in the management of advanced Cutaneous T-cell lymphoma. The present study reports the retrospective analysis of patients treated with TSET at our center.

Material & Methods: A total of 12 patients of Cutaneous T-cell lymphoma were analyzed from January 2004 to March 2011. Patients were treated with Elekta Precise Linear accelerator with HDR mode of 3000cGy/min at isocenter. All the patients were treated as per the Stanford technique, delivering a total dose of 36Gy with a dose of 1.2Gy/f/day using 4MeV electron beam. Out of 6 fields planned, 3 fields per day were delivered alternatively. In all the sessions nails and eyes were shielded with 3mm lead shield. Boost dose of 10 Gy was delivered to the self-shielded regions.

Results: Out of 12 patients studied, nine had stage IIB disease. Seven patients achieved complete remission following TSET while 5 patients died of progressive disease during treatment. After completion of radiation, seven patients continued on PUVA therapy. The main complication observed were non hematological toxicities: four patients had grade III skin reaction and rest patients had grade II dermatitis. At median follow up time of 3.5 years, four patients were alive without any disease. Three patients died due to relapse in non cutaneous sites within 2 years.

Conclusion: Total Skin Electron Beam Therapy was well tolerated and found to be effective treatment of advanced Cutaneous T-cell lymphoma.

Biography
Dr. Manoj Kumar Behera has completed MD in Radiation Oncology from Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, one of the premiere institutes in Radiation oncology in India in 2009. Now he is in 2nd year of Senior Residency (SR) in All India Institute of Medical Sciences (AIIMS). He is specifically interested in SBRT/SRT, brachytherapy and Clinical oncology research as well as patients care.