

## Recurrent Kangri cancer treated with external beam radiotherapy on a cobalt unit

Sir,

The presentation and spectrum of skin cancer in Kashmir valley of Indian subcontinent is drastically different from rest of the country. Maxwell, in 1819 first reported skin cancer of the lower extremities in Kashmiri population attributing it to the use of Kangri.<sup>[1]</sup> Unlike skin cancers in general the biological behavior of these cancers is very aggressive with a substantial risk of loco-regional metastasis in 20-50% cases.<sup>[2,3]</sup> Surgery is the frequent modality of treatment used in the management of these tumors. We want to share our experience with use of external beam radiotherapy alone in a case of recurrent Kangri cancer in the following index case. RT 377/06, a 46-year-old rural female developed itching followed by appearance of nodular swellings on the medial aspect of her right thigh over her previous operated scar (operated eight months earlier for her Kangri cancer). She was a chronic user of Kangri since her childhood. Her systemic examination was normal. Local examination revealed 3-4 nodular swellings with irregular margins, crusted surface and an indurated base over the previous operated site and in the background of reticular thermal keratotic lesions (erythema abignae) [Figure 1]. She refused re-do surgery or treatment with electrons however, agreed for an edge biopsy of the lesion which confirmed the diagnosis of squamous cell carcinoma with features of karatoses. Patient was treated on a telecobalt unit and received external beam radiotherapy of 55 Gy/5 weeks by a direct portal with wax bolus [Figure 2]. She was also given prophylactic radiotherapy of 45 Gy/4 weeks to her inguino-femoral region. Patient completed the treatment protocol to both the sites without any

toxicity and showed a complete response [Figure 3]. Patient is on regular follow-up and disease free at two and a half year follow-up.

A Kangri is an indigenous portable warming device in



Figure 1: Recurrent Kangri cancer on medial aspect of right thigh (Pre-treatment). Note underlying erythema abignae



Figure 2: Patient receiving external beam radiotherapy on telecobalt equipment. Note the set-up and wax bolus



Figure 3: Post-treatment follow-up (at 6 months) showing complete resolution of tumor

which burning charcoal is carried. The device is usually tucked in-between the thighs/legs or kept in contact with the abdominal wall by Kashmiri population to generate warmth during the winter months. Prolonged use of Kangri induces thermal keratotic changes which take the shape of superficial, serpegenous, reticular blackish brown colored lesions called erythema abignae [Figure 1]. The Kangri cancer starts as a nodule which is often associated with itching, occasional bleeding and ulceration. Because of local nature of this disease entity, there is dearth of literature regarding the treatment policy to be employed in these patients with clinically negative regional nodes and as; the ability to identify subclinical nodal disease prior to its manifestation is limited.<sup>[3,4]</sup> prophylactic treatment of the regional nodes seems justified on the lines of many head & neck tumors. Presently, we, at our regional cancer centre are, routinely using prophylactic regional nodal radiotherapy in recurrent and lesions beyond T-2 stage with encouraging results.<sup>[5]</sup> In this context, use of radiotherapy to primary site whenever indicated with prophylactic regional nodal irradiation has proved its efficacy in reducing the loco-regional relapse and ensured a high cure rate in this peculiar malignancy as

exemplified by successful treatment in this index case.

### Acknowledgment

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Patient consenting for treatment.

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