Commentary

Sir,

We would like to congratulate the authors for their diligent attempt to scientifically address an important yet often neglected issue in the management of head and neck squamous cell cancer (HNSCC) patients, namely the assessment and maintenance of nutritional status. It was indeed interesting to note that in the demographic pattern of head and neck cancer oropharyngeal carcinoma[1] was the most common subsite as the largest burden of HNSCC in this country is usually found to be comprising cancers of the oral cavity and more specifically the buccal mucosa. This could be attributed to the fact that this data comes from a Radiotherapy Department. Also, since nasopharyngeal carcinoma is a much more common entity in North East India, future studies of a similar nature could possibly include patients of such malignancies, as their treatment indeed entails significant morbidity and would compromise nutrition to at least an equal if not greater extent.

We would also compliment the authors for having successfully devised a diet using easily available local foods, which provide the required caloric intake without the use of additional dietary supplements, which is very important given the limited socioeconomic resources available to the majority of cancer patients in this country. However, we did not note any significantly rich sources of iron in the dietary plan, as in the preexisting scenario of iron deficiency and impaired iron utilization, one may not be able to correct pretreatment anemia, which has been shown to be a poor prognostic factor,[2] and would also go on to impede the early implementation of cancer directed therapy in such patients. We would also like to reiterate that adverse changes in nitrogen balance and electrolytes are a very well-known phenomenon during chemo irradiation,[3] and the importance of adequate intake of food and supplements rich in electrolyte content cannot, but be overstated. Easily available foods such as eggs, fish, and bananas would prove valuable in the same setting.

It is worthwhile to note that only 10% of the patients included in the study had good nutrition, which increased to 45% after the dietary intervention. These are alarmingly high when confronted with the data from the west which show malnutrition in only 30–50% of head and neck cancer patients at baseline.[4] This may very well underscore many significant differences between our patient populations, namely a lower socioeconomic status, a diet intrinsically poorer in noncarbohydrate macro and micronutrients, which has been demonstrated at some length by the authors. It may be essential to curtail and tailor our therapies based on the variable tolerance to therapy as a consequence of the above changes. In addition, it is known that resting energy expenditure (REE) in patients undergoing chemo radiation increases during the course of chemoradiotherapy due to the stresses imposed by such rigorous therapy.[5] The increased REE is seen to persist as late as 2 weeks postchemoradiotherapy. This catabolic state, when compounded with severe malnutrition, can only be expected to be severely detrimental. This may be difficult to compensate given the difficulties in determining REE in the clinical setting. A crude but effective method would be to overcompensate caloric intake, keep a close watch on weight loss, and view nutritional management in terms of continuing care rather than as a snapshot.

Pretreatment body mass index (BMI) in oropharyngeal cancer has been found to be a prognostic factor for 5 years overall survival,[6] and it is extremely heartening to note that the test diet caused an increase in the BMI in the study patients. However, the extent to which this occurred is not mentioned in the study. Despite the inherent inaccuracies of BMI, it remains an easy parameter to compute in the clinic and does not necessitate the use of additional investigations.

We also compliment the authors for having used indices such as the nutritional assessment index (NAI) and prognostic nutritional index (PNI) with an attempt to reduce the subjectivity in nutritional assessment. However, these indices were essentially developed for gastrointestinal cancers in the assessment of postoperative outcomes. Such malignancies would entail extensive surgeries, with a prolonged period of postoperative recovery in a specialized center, where the accessibility to investigations such as prealbumin and retinol binding protein may be much easier than what is encountered in clinical outpatient practice. In the context of the authors' setting, we would expect most locally advanced oropharyngeal cancers to be treated with concurrent chemoradiotherapy on an outpatient basis, and as such the accessibility to such investigations would entail a financial burden which would be feasible only in the setting of a clinical trial. Also, these indices have not been truly validated in HNSCC. Limited data does exist whereby patients deemed severely malnourished patients (as considered by a PNI >39%) suffered a greater incidence of iatrogenic complications and also died early.[4] Thus, PNI

may predict poor outcomes where aggressive multimodality treatment with curative intent is contemplated.

This study on long-term follow-up with the possible accrual of more patients may actually provide us an answer as to whether the indices can be applied in the mentioned setting. An attractive alternative would be to use patient generated assessment tools like the subjective global assessment[7] and nutritional risk screening 2002[8] to quickly and easily identify malnourished patients in the clinic and institute appropriate interventions like the ones so innovatively derived by the authors. In fact, at the opposite end of the spectrum, studies from this country itself have shown that documenting a simple statistic such as percentage weight loss in the preceding month may compare very well to objective methods in the setting of gynecological cancer.[9,10] It would be worthwhile to conduct a study comparing scientific methods such as those practiced by the authors with ostensibly more subjective methods in a prospective cohort of patients and see whether the loss of scientific information gleaned does indeed translate to a loss in clinical benefit.

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Conflicts of interest

There are no conflicts of interest.

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