



Letter to the editor

8 “S” in oral cancer

We read the letter by Dcruz et al with great concern and would like to add further on the current status in Oral cancer [1].

Oral cancer is among the most preventable cancer globally and yet is the 6th most common malignancy in the world. Smoking, Smokeless tobacco, Spirit are implicated as the causal factors for oral cancers while, Somatic genetic mutations, Salivary micro flora, Sexual Practices, Spicy food, Systemic inflammation and Sharp tooth are the possible non classic factors with fragmented case reports published in the literature [2–5].

The interaction between the cumulative exposure to carcinogens and the host predisposition factors drives cancer pathogenesis through initiation of somatic genomic mutations. The maligned genes can affect the proto-oncogenes or the tumour suppressor genes.

Healthy diet comprising of essential micro-nutrients and anti-oxidants can regress the generation of harmful free radicals and may also reduce the endogenous DNA damage with the mutation that sets in [6]. The significant diversity in the salivary microflora observed in the cancer samples than in the normal samples [7] will open doors for new drugs and investigations that can detect this subtle transition of microbes.

A thick blanket of environmental carcinogens from all viable life sources: Air, Water, Food and Soil has permeated into the human body, sowing seeds to Cancer and afflicting a significant proportion of healthy individuals.

The cut, burn and poison therapy which remains the gold standard management of oral cancer cripples the immune system, however there has been a paradigm shift in the severity of neck dissection from radical neck dissection to selective neck dissection. This can be explained by a better understanding of the molecular biology of tumours, lymphatic drainage pathways and the meticulous correlation of metastatic nodes with anatomic and functional imaging. We need to fortify the immune system and shield the body from penetrations of carcinogens rather than suppressing it. This would minimise the incidence of all types of malignancies in the near future. Research in oncotheology and exploring the patients mind post Cancer diagnosis may seem to be promising in the near future.

Sharp teeth seems to be an innocuous cause for a dreadful malignancy to arise. Patients fail to understand this link and refute the diagnosis. The tip or the borders of the tongue are interposed between the dental arches, three times per minute in a normal swallowing pattern [8]. This close interdigitating of the tongue between the dental arches and the presence of a sharp tooth makes it vulnerable to a persistent mechanical irritation. A sharp tooth can trigger a malignancy by the repeated trauma that invokes local inflammation. Hypoxia and inflammation are the two sides of the same coin. The hypoxic epithelium caused by the physical injury disturbs the tumour micro-environment and is at a significant risk of ‘dysplasia’ a precursor of Oral cancer [9,10]. This is similar to the chemical injury seen in oral sub mucous fibrosis caused by the intake of Arecanut.

Cataloguing patients as oral cancer based on their habits should no more be a norm considering the paradigm shift in the cancer predators. Oral cancer known for its proclivity in elderly individuals has now extended its wings by afflicting younger individuals who do not smoke or drink.

Regardless of the ease in examining the oral cavity by direct visual examination oral cancers are diagnosed at advanced stages. Initial misdiagnosis, callous patient attitude, ignorance of the patient or the professional can be eschewed. This contributes to a poor prognosis, enables the tumour to gallop and reduce the survival rate.

Novice surgeons need to be cautious while they excise the primary tumour with positive margins, this can significantly violate the tumour biology, tumour-host equilibrium and tumour behaviour while we attempt to redo the surgery. This is very similar to a stone thrown on a bee hive which attacks us with vengeance. Tumour cells radiate beyond the apparent surgical margins much like the sun ray filaments in all 3 dimensional directions, a major cause of concern for positive margins and local recurrence. Surgeons are in a dilemma as they need to strike a balance between clear margins with that of minimal functional morbidity.

The other salient considerations in the management of oral cancer is the 4R principle. Resect with adequate margins with no discount in the oncological clearance, Reconstruct with a well-designed flap, Rehabilitate to improve the quality of life, functional morbidity, social acceptance and lastly have a hawk eye on the perimeter of the re-constructed flap or any other signs of recurrence.

Conflict of interest

The authors declare that there is no conflict of interest.

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