

# Carcinoma of tongue in xeroderma pigmentosum: a medical image

**KEYWORDS:** xeroderma pigmentosum ■ tongue carcinoma

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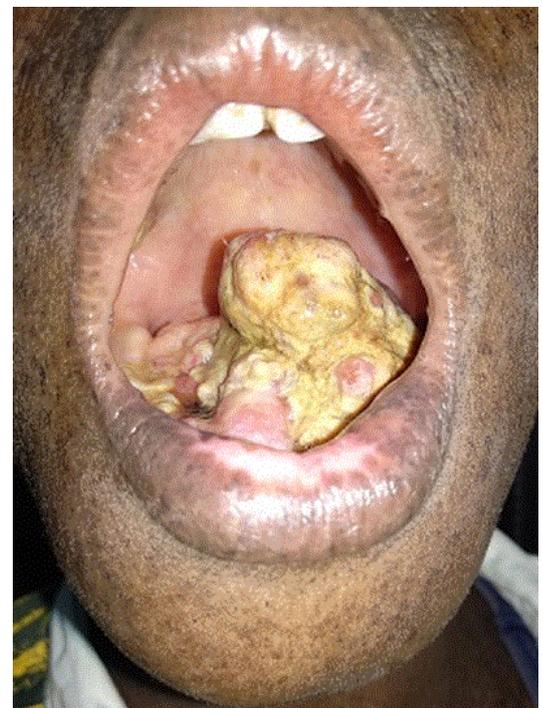
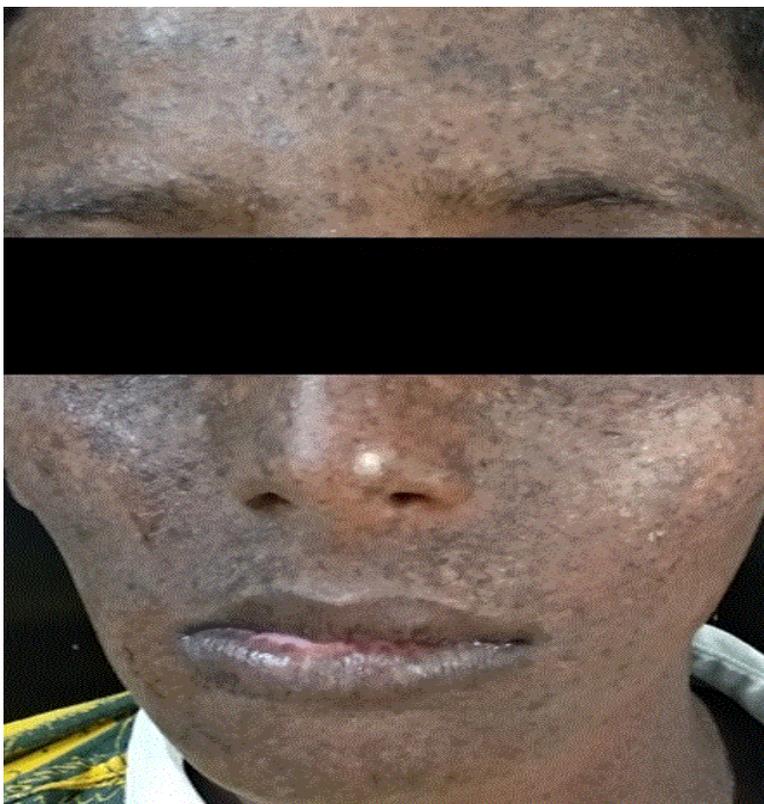
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Xeroderma Pigmentosum (XP) is a rare disorder transmitted in an autosomal recessive manner due to defect in nucleotide excision repair (NER), leading to deficient repair of DNA damaged by Ultraviolet (UV) radiation. The oral manifestations are mainly related to the occurrence of malignant tumors in the lips, tongue and buccal mucosa (FIGURE 1).

Carcinoma of the tip of the tongue has been reported in XP patients representing a 3000 fold increase in tongue tumors over the general population. The location is generally on the posterior and lateral tongue. Biopsy of the growth in our case of 12 y old boy with XP was also consistent with moderately differentiated squamous cell carcinoma. In a study conducted

by Rosin et al. the exfoliated cell micronucleus test was applied to different sites in the oral cavities of four XP patients. The greatest elevation of micronucleus frequencies was collected from the dorsal tip of the tongue. Oral cavity is relatively less exposed to UV radiation than skin and role of chemical environmental carcinogens that cause DNA damage is implicated in oral cancer in XP patients. A study by Fumio et al. showed that XP group A NER gene acts as protective factor in chemical induced tongue carcinogenesis. Surgical treatment in extensive growth as in this case is considered depending upon risk to benefit ratio and prognosis is guarded. Unfortunately, our patient was lost to follow up.



**Figure 1. Occurrence of malignant tumors in the lips, tongue and buccal mucosa.**