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Title: Prevention of osteonecrosis in patients with head and neck cancer treated with radiation therapy; a Delphi consensus study

Body: Background:

Osteoradionecrosis (ORN) is a long-term complication of radiotherapy, characterized by bone tissue necrosis that fails to heal for at least three months. It significantly impacts quality of life through pain, nutritional issues, infections, and pathological fractures. This study aimed to establish a consensus on the prevention and management of ORN among experts managing head and neck cancer (HNC) patients.

Methods:

A three-round online Delphi survey was conducted between March and June 2023, involving surgeons, specialist dentists, radiation oncologists, radiotherapists, and dental hygienists. Additionally, input from patients and carers was gathered through an anonymous online survey.

Results:

75 experts were contacted via email to complete the Delphi survey with a response rate of 62.7% (n=47) to the initial survey. The response rate for rounds 1 and 2 was consistent at 44% (n=33). 26 participants responded to round 3 with an attrition rate of 21%. The patient and carer survey received 28 responses. Consensus was reached on the importance of pre and post oral health assessment and education for HNC patients to minimise their risk of ORN.

Conclusion:

This study highlights the need for a standardised oral health assessment tool and multidisciplinary care of patients to prevent and manage ORN.

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