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Oral and dental symptoms in acute hospital specialist palliative care

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Abstract

Aims

To identify the prevalence and severity of oral pain and dry mouth in patients receiving specialist palliative care in the acute hospital inpatient setting. Also to identify patients using dentures and those who have visited a dentist in the last year.

Methods

This was a cross sectional study conducted on inpatients in an acute hospital. Patients who met the inclusion criteria were asked to fill out a questionnaire about their oral symptoms.

Results

50 patients were included in the study.Thirty five (70%) reported dry mouth with eight patients (16%) reporting oral pain. Twenty three (46%) of those surveyed had dentures. Eleven (22%) of the patients had visited a dentist in the last year.

Discussion

The results of this study highlights the undetected oral symptom burden in this setting. Consultation with dentists may improve care and should be considered by specialist palliative care teams.

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Introduction

Oral pain and xerostomia are common presentations in patients receiving specialist palliative care and can have many contributing factors[1]. Mucositis is a painful condition resulting in inflammation of the mucous membranes of the mouth[1,2] Dentoalveolar infections can include fungal infections, dental abscess and osteonecrosis of the maxilla and mandible. In the context of malignancy, these infections can be worsened by immunocompromise from chemotherapy agents and by radiotherapy to the head and neck[2] Xerostomia has been ranked as the third most distressing symptom in advanced cancer and can result in difficulty speaking, lack of enjoyment of food and poor fit of dentures which rely on surface tension for stability.[3] Furthermore, cachexia due to the underlying disease can result in a loss of musculature and adipose tissue in the orofacial region resulting in reduced support of dentures. This can result in difficulty eating and oral pain. These symptoms can both be caused by underlying disease or therapeutic interventions such as chemotherapy, medications or radiotherapy.[4] Symptoms can range from mild disturbance to severe debilitating conditions and be further complicated by side effects of medications[4].

Although oral symptoms can significantly effect quality of life in the palliative care setting, they are often under-reported by patients to their physicians[5]. Furthermore, many patients with advanced disease may have reduced ability to selfcare which increases symptom severity[6]. Early identification and treatment of oral issues can reduce suffering in patients with life limiting diagnoses[3]. Dentures provide an important aesthetic benefit as well as improving masticatory function therefore contributing to quality of life in partially edentulous and edentulous patients[7].

Barriers to addressing oral symptoms in this population have been identified from both the healthcare professionals and patients perspective. Healthcare professional related barriers include: lack of understanding of the prevalence of symptoms and impact on quality of life, lack of clarity as to who is directly responsible for oral care and taking an opportunistic rather than routine approach to oral care[6]. Patient barriers include: difficulty providing oral self-care[8] and refusal of oral care[6]. Limited access to dental services and lack of integrated dental care team have also been highlighted.[8]

Palliative care dentistry has been defined as the management of patients with progressive, far-advanced disease for whom the oral cavity has been compromised either by disease or by treatment[8]. Although oral care delivered by dentists in the hospice setting has been demonstrated to improve oral care and symptoms, dentists are not routinely available for patients in the hospice setting[9]. Furthermore, dentists are not routinely included in palliative care multidisciplinary teams globally[4,10]. The importance of inclusion of dental care for

patients with life limiting illnesses has been highlighted, with dental input of particular relevance in the context of head and neck malignancy[4,5]. In a study of palliative care acute hospital inpatients, 65% who were assessed by a dentist required intervention[10].

The aims of this study were:

1. To identify the prevalence of oral pain and dry mouth in this population and its importance to them.
2. To identify the percentage of patients who have visited a dentist in the last year.
3. To identify the prevalence of dentures.

Methods

This was a cross-sectional study conducted on inpatients in an acute hospital in the South East of Ireland. Ethical approval was obtained. Patients were eligible for inclusion if they were: referred to the hospital specialist palliative care team, over 18 years, able to clearly communicate and give informed consent. Informed consent was gained from those eligible to be included in the study prior to completing the questionnaire. The questionnaire was then completed with a member of the research team. The questionnaire asked patients to identify if they had oral pain and dry mouth and to rate its severity of both on numeric scale of 1-10. The second question asked if they had a dry mouth and if so to rate its severity on a numeric scale of 1-10. It also asked if they had prosthetic dentures and asked if they had visited a dentist in the last year. Information on patient demographics were recorded.

Results

A total of 50 consecutive patients who met the inclusion criteria and gave informed consent. 58% were male and 42% female. The mean age was 66.1 years ± 12.8. The most common diagnoses were cancer of the head and neck (12%) prostate cancer (12%) and breast cancer (10%) Table 1.

Eight (16%) of the patients reported oral pain at the time of the survey and those that had reported pain rated with a severity mean of 5.66/10 (±1.73) Thirty five (70%) reported dry mouth and those that had dry mouth rated the severity of that symptom at mean of 6.25/10 (±2.79). Twenty three (46%) of those surveyed had dentures. Eleven (22%) of the patients had visited a dentist in the last year.

Table 1. Primary disease of patients included in the survey

Disease	Number	Percentage
HN	6	12
Prostate	6	12
Breast	5	12
Urinary tract	5	10
Lung	5	10
Upper GI	5	10
Ovarian	4	8
Colon	3	6
Peritoneium	2	4
Brain	2	4
Pancreas	2	4
CUP	2	4
Neuroendocrine	1	2
Skin	1	2
Non malignant	1	2

Discussion

This study identified a high prevalence of dry mouth in this group of patients as well as a substantial number reporting oral pain. This aligns with the current evidence reporting that these symptoms may go undetected [5]. It is likely that the patient and healthcare professional factors previously reported in the literature to date are contributing to this.

Only 22% of surveyed patients had visited a dentist within the last year and nearly half of the participants reported having dentures. It is possible that patients do not prioritise their oral care while dealing with a life limiting diagnosis. The evidence for improving collaboration between palliative care teams and dentists is increasing. Our study adds to the evidence base that palliative care patients have unmet needs related to oral symptoms and are not receiving the potential benefit by visiting a dentist regularly. These findings support the concept of including dentistry as a discipline for patients receiving palliative care. Palliative care teams should give consideration to involvement of local dentists to improve patient care and explore the processes involved to facilitate regular dentistry input.

There are several limitations to this study. Patients were required to be able to give consent and respond to the questionnaire, this excluded many of the patients near end of life, who would have required objective assessments. Although all diagnoses were included, the study

had a poor representation for patients with non-malignant diagnoses and mainly included patients with advanced cancer.

In conclusion, this study highlights the burden of oral disease faced by patients in a palliative care setting. Palliative care teams should consider including dentists in the multidisciplinary care of patients to optimise oral care and quality of life. Further research in the area should concentrate on the barriers patients face to access dental care during this period with the view to improving access overall.

Declarations of Conflicts of interest:
None declared.

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