

## Research papers

# A survey of oral and dental disease presenting to general medical practitioners

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### ABSTRACT

**Background** In some areas of the country it is now virtually impossible to register as a new patient with an NHS dentist. As a consequence it is inevitable that patients with oral and dental problems will seek advice from general medical practitioners (GPs), who on the whole have had no formal training in this area.

**Aim** To quantify the frequency and type of oral conditions presenting to GPs, and, if a second opinion was sought, to document to whom these patients were referred.

**Method** We carried out a postal questionnaire survey of 156 GP principals in the districts of Doncaster and Bassetlaw.

**Results** There were 114 (73%) responses with 52 (46%) GPs seeing between two and five patients with oral symptoms/conditions weekly. Dental or denture problems were seen by 48 (42%) GPs on a weekly basis, while other pathology seen at least

monthly included oral ulceration ( $n = 104$ , 91%), candidiasis ( $n = 98$ , 86%) and a dry mouth ( $n = 83$ , 73%). Although referrals were commonly made to oral and maxillofacial surgery ( $n = 39$ , 34%), many patients were also frequently asked to attend a dentist ( $n = 28$ , 25%).

**Conclusion** The results confirmed our suspicions that a surprisingly high number of patients attended their GP with oral and dental conditions. The reasons for this are multifactorial, but it inevitably leads to an increased workload in general practice. This situation is not likely to improve within the near future unless access to NHS dentistry improves. When a specialist opinion was sought, patients were most likely to be referred to their local oral and maxillofacial department, or be asked to return to their dentist.

**Keywords:** disease, oral, practitioner, referral

## Introduction

Many patients with oral symptoms present initially to their general practitioner (GP) with a variety of problems, ranging from simple benign disease to pre-malignant or malignant conditions. Early recognition and diagnosis of this disease spectrum is of paramount importance in its successful treatment, and directly affects prognosis.<sup>1</sup>

The primary care clinician who deals with oral pathology must therefore be in a position to identify all suspicious lesions and to seek specialist advice as

quickly as possible when unsure, while also referring to the most appropriate discipline.

Currently, NHS dentistry has reached a crisis point with many local dentists not accepting any new NHS patients. It also recently been recommended that patients be reviewed less frequently than on a traditional six-monthly basis, there being no existing evidence to support this practice of frequent scheduled reviews.<sup>2</sup>

Given the difficulties found by many patients in obtaining an NHS dentist in the UK, it was our

impression that a significant number would instead present to their GP with oral symptoms. In order to quantify this, a survey was carried out among GPs in the Doncaster and Bassetlaw regions. Our aim was to find out how often patients presented with oral symptoms/conditions, which type of symptoms/conditions were frequently seen and, if appropriate, where these patients were referred.

## Method

In early 2003, a postal survey was carried out of 156 general medical practitioners (GPs) in the Doncaster and Bassetlaw areas of south Yorkshire and north Nottinghamshire. All participants were fully registered practice principals, whose details were held on a GP database at Doncaster Royal Infirmary.

A questionnaire (Appendix 1) was sent with a prepaid envelope enquiring about the frequency and type of commonly seen oral conditions. Questions were asked specifically about benign and malignant disease, and dental or denture-related problems. Additionally, if a second opinion was sought, GPs were asked to specify the specialist to whom the patient would be referred.

Returns were sent by hospital post to the department of ear, nose and throat surgery at Doncaster Royal Infirmary. No follow-up telephone calls were made and no repeat questionnaires were sent.

## Results

There were 114 completed questionnaires returned, which represented a 73% response rate. Sixteen (14%) GPs reported seeing more than five patients with oral symptoms/conditions a week, while 52 (46%) saw between two and five similar patients weekly. Thirty-three (29%) GPs reported dealing with less than two cases per week, and a minority ( $n = 13$ , 11%) gave no reply to this question.

Dental and denture problems were the commonest subgroup of conditions seen. Forty-eight (42%) GPs documented seeing this category of patient weekly, which included those with dental caries and periodontal disease ( $n = 42$ , 37%). Interestingly, six (5%) GPs described seeing patients with denture-related problems weekly, which increased on a monthly basis ( $n = 45$ , 40%).

Candidal infections were the commonest mucosal condition reported, presenting weekly to 24 GPs (21%), and monthly to a further 74 (65%). Oral ulcerations were also frequently encountered (weekly:  $n = 23$ , 20%; monthly:  $n = 81$ , 71%), as was a dry mouth (weekly:

$n = 15$ , 13%; monthly:  $n = 68$ , 60%). Twenty-eight GPs (25%) experienced concerns on a monthly basis about oral malignancy that may result in a specialist referral.

When a specialist opinion was sought, patients were most likely to be referred to their local oral and maxillofacial department ( $n = 39$ , 34%) or be asked to return to their dentist ( $n = 28$ , 25%). Thirteen (11%) GPs would routinely refer to their local ear, nose and throat (ENT) unit for an opinion, while a considerable number of GPs ( $n = 32$ , 28%) said they would refer on to the most appropriate specialty, depending on the presenting complaint.

## Discussion

We received a relatively high number of returns ( $n = 114$ , 73%) from the group of 156 principal GPs surveyed. This is despite the fact that some authors consider the response rates of GPs to questionnaires to be following an overall downward trend.<sup>3</sup>

Our questionnaire was designed with simplicity in mind (Appendix 1), and contained three distinct sections which could be completed in a matter of minutes. Questionnaires were both distributed, and could be returned via the hospital postal service, which would undertake regular visits to local practices. A prepaid envelope could be utilised alternatively, if the practitioner wished.

The return rate may also have been influenced by the fact that many GPs consider this to be a relevant subject, and indeed, many expressed frustration (in the comments section) with the difficulty their patients seemed to be having in registering with an NHS dentist.<sup>4</sup>

A study limitation included the fact that no demographic information was collected about the GPs that were surveyed, and as a result we are unable to comment on the non-response bias. We also were relying on the memory of each participant to recall accurately their recent experience of the subject.

A large number of GPs ( $n = 52$ , 46%) reported that they saw between two and five patients with oral and dental problems every week, with a further 16 (14%) reporting seeing more than five patients on a weekly basis. Surprisingly, 42 (37%) GPs documented undertaking consultations for dental disease every week, while a further 54 (47%) saw this group of patients monthly. These figures exclude denture-related problems which are recorded in a separate section (Table 1). These results may be explained by a variety of factors, including the difficulty obtaining access to an NHS dentist, fear and anxiety of the individual patient resulting in irregular dental attendance, financial restraints,

**Table 1** Oral symptoms/conditions commonly seen

	Number of GPs ( <i>n</i> ) (%)				
	Weekly	Monthly	Yearly	Never	No answer
Oral ulceration	<i>n</i> = 23 (20%)	<i>n</i> = 81 (71%)	<i>n</i> = 9 (8%)	<i>n</i> = 0 (0%)	<i>n</i> = 1 (1%)
Candidiasis	<i>n</i> = 24 (21%)	<i>n</i> = 74 (65%)	<i>n</i> = 15 (13%)	<i>n</i> = 0 (0%)	<i>n</i> = 1 (1%)
Angular cheilitis	<i>n</i> = 3 (3%)	<i>n</i> = 73 (64%)	<i>n</i> = 36 (31%)	<i>n</i> = 1 (1%)	<i>n</i> = 1 (1%)
White patch	<i>n</i> = 0 (0%)	<i>n</i> = 17 (15%)	<i>n</i> = 90 (79%)	<i>n</i> = 6 (5%)	<i>n</i> = 1 (1%)
Oral pigmentation	<i>n</i> = 0 (0%)	<i>n</i> = 9 (8%)	<i>n</i> = 73 (64%)	<i>n</i> = 31 (27%)	<i>n</i> = 1 (1%)
Dental problems	<i>n</i> = 42 (37%)	<i>n</i> = 54 (47%)	<i>n</i> = 15 (13%)	<i>n</i> = 3 (3%)	<i>n</i> = 0 (0%)
Denture problems	<i>n</i> = 6 (5%)	<i>n</i> = 45 (40%)	<i>n</i> = 50 (44%)	<i>n</i> = 12 (10%)	<i>n</i> = 1 (1%)
Lip lesion	<i>n</i> = 7 (6%)	<i>n</i> = 42 (37%)	<i>n</i> = 61 (53%)	<i>n</i> = 2 (2%)	<i>n</i> = 2 (2%)
Dry mouth	<i>n</i> = 15 (13%)	<i>n</i> = 68 (60%)	<i>n</i> = 30 (26%)	<i>n</i> = 1 (1%)	<i>n</i> = 0 (0%)
? Malignancy	<i>n</i> = 0 (0%)	<i>n</i> = 28 (25%)	<i>n</i> = 82 (72%)	<i>n</i> = 3 (3%)	<i>n</i> = 0 (0%)

and the fact that the patient may be unaware of which professional to consult about their problem.

Dental practitioners will have received a significant amount of undergraduate teaching in oral medicine and pathology. Comparatively, medical students undertaking a modern modular-based curriculum receive minimal theoretical and practical instruction as to the extent and range of oral disease. Indeed, one of the authors (MB), was exposed to less than one hour of teaching in oral pathology throughout his five-year medical degree. Consequently, it is not surprising, that it has been shown that there are some discrepancies in relation to risk factor knowledge and clinical examination techniques between medical and dental practitioners.<sup>5</sup>

A further study by Anderson *et al* has demonstrated that GPs are more likely to prescribe antibiotics for acute dental problems than dentists. Antibiotics without dental treatment have been shown to be ineffective in the management of patients with acute dental pathology, and indeed may contribute to bacterial resistance.<sup>6</sup>

Twenty-eight (25%) GPs saw an oral condition every month that required a second opinion due to a concern of malignancy. This number does not reflect those that were subsequently diagnosed as neoplastic, however, it confirms that GPs have a high level of awareness and suspicion of oral cancer. This is supported by evidence from other authors that GPs in general were good at referring patients early and suggesting malignancy as a possible diagnosis.<sup>7,8</sup>

With regard to more benign oral mucosal disease, candidiasis, oral ulceration and a dry mouth were

conditions commonly seen and managed in general practice. Some GPs noted on their returns that a specialist opinion may be sought in persistent cases or those not responding to conventional treatment. In the authors' opinion, dry mouths are often medication induced, and most appropriately treated by a GP in the first instance, who is aware of the patient's current medication.

Referrals for specialist opinions were made to oral and maxillofacial surgery, general dental practice and ENT surgery in decreasing order of frequency. Thirty-two (28%) GPs, however, would refer to whatever they thought was the most 'anatomically relevant' discipline.

In general, when a malignancy is suspected, fast track referral to a local head and neck cancer unit should be arranged. This team would normally include maxillofacial and ENT surgeons, and as a result the specialty to whom the patient is referred is not as important as a delay in referral, which may result in disease progression.

Evidence suggests that there will be an increased demand for diagnosis and management of patients with both oral conditions and oral manifestations of systemic disease.<sup>9</sup> Accordingly, our results have shown that GPs commonly see patients presenting with oral and dental symptoms, and it is our opinion that this is likely to increase as more dentists decline to accept new NHS patients. This must increase the workload of already busy GPs, and burden them with a range of oral and dental disease in which they have had little formal training.

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## CONFLICTS OF INTEREST

None.

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## Appendix 1 Survey of oral disease in general practice

### 1 How often do patients present with oral symptoms/conditions?

Frequently	>5 per week	
Occasionally	2–5 per week	
Rarely	2 per week	
Other: please state	number per week on average	.....

### 2 How often do you see the following oral symptoms/conditions?

	Frequently (weekly)	Occasionally (monthly)	Rarely (yearly)	Never (none)
Oral ulceration				
Candidiasis				
Angular cheilitis				
White patch				
Oral pigmentation				
Dental problems (decay, gum disease)				
Denture problems				
Lip lesion>				
Dry mouth				
Concern of malignancy				
Other: please state condition and frequency .....				

### 3 If referral is necessary who are you likely to refer to?

General dental practitioner  
 Oral and maxillofacial surgeon  
 Ear, nose and throat surgeon  
 Other: please specify .....

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