

Incidence and management of oral conditions in general practice

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SUMMARY

Despite a high community prevalence, little is known about the occurrence of oral conditions in general practice. In an observational study, 354 new cases of oral complaints were recorded in 35 participating practices during a period of six months (cumulative incidence = 6.7 per 1000 per year). The incidence was highest in children under five years of age (21% of all cases). The conditions diagnosed most frequently were aphthous ulceration, oral candidiasis, and herpes simplex infection. Most oral conditions were minor ailments, and could be dealt with by the general practitioner alone.

Keywords: oral conditions; minor ailments; incidence.

Introduction

COMPLAINTS of the mouth are common and may cause significant morbidity. Patients often present to their general practitioner (GP) with pain, difficulty in eating, or cosmetic complaints. The conditions are rarely serious and tend to resolve quickly.

Previous studies have estimated the point-prevalence of oral disorders in the general population to be between 10% and 65% in adults,^{1,2} and around 4% in children.³ Large scale epidemiological studies on specific oral conditions have been performed in Asia,¹ the United States,³ and Europe.⁴ Despite a high community prevalence, little is known about the occurrence and management of oral lesions in general practice, especially in children.

Method

Thirty-four GP trainees and 20 GP trainers from 35 practices, representing 106 362 patients, participated in this study. Before the start of data collection they received training on the diagnosis and treatment of oral conditions from an oral surgeon and a GP. This was supported by a colour atlas and booklet for personal use within the practices.

From June to December 2000, the GPs registered details of all consultations regarding oral conditions where the following conditions were met: informed consent was obtained from the patient; the complaint was about the mouth, tongue and/or lips; and no doctor had been consulted for this complaint in the past six months. Demographics, description of the lesion, diagnosis, and treatment were recorded on a standard form.

Results

During a period of six months, it was recorded that 354 patients had a new oral complaint. The incidence of oral complaints was calculated at 6.7 per 1000 per year, with a range of 0.7 to 20.1 per 1000 per year across practices.

Table 1 shows that aphthous ulceration (27%), followed by oral candidiasis (15%) and herpes simplex (10%) were diagnosed most frequently. A malignancy was suspected in three patients. After referral, it was confirmed that two of these patients had squamous cell carcinomas, and the third patient had a benign lip tumour. Fifty-five patients had more than one diagnosis recorded, owing to multiple or differential diagnoses being made by the GP (Table 1).

There were marked differences in age-specific incidence. Twenty-one per cent of all patients with mouth symptoms were aged under five years (incidence = 18.4 per 1000 per year). These children accounted for 18% of patients with aphthous ulcers, 47% with oral candidiasis, and 31% with herpes labialis (Table 2).

In a large number of cases, advice only was given to the patient. Nevertheless, 45% of patients did leave the surgery

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HOW THIS FITS IN*What do we know?*

Oral conditions are common, but very little research has been aimed at finding the incidence in general practice. Only a few studies have included small children.

What does this paper add?

Oral complaints occur frequently in general practice, and they commonly concern young children. The most common diagnoses are: aphthous ulcers, oral candidiasis, and herpes simplex infections. The complaints can often be dealt with by the general practitioner alone, without the need for referral or further diagnostic tests.



Table 1. Frequency distribution of diagnoses in patients with oral conditions (n = 354).

Diagnosis	Number of incident cases (%)
Aphthous ulcers	95 (27)
Oral candidiasis	52 (15)
Herpes simplex infection	36 (10)
Gingivitis/eruption of tooth	22 (6)
Benign tumour	27 (8)
Tongue disorders	26 (7)
Burning mouth syndrome	23 (7)
Pressure ulceration	20 (6)
Normal or unknown aetiology	14 (4)
Dental abscess	13 (4)
Trauma/wound	13 (4)
Caries or broken tooth	7 (2)
Cheilitis angularis	6 (2)
Oral lichen planus	5 (1)
Halitosis	4 (1)
Leukoplakia	3 (1)
Suspected malignancy	3 (1)
Other diagnoses	41 (5)
Total	386 ^a

^aTotal frequency exceeds 100% as more than one diagnosis was recorded in some patients.

Table 2. Age of patients, and management at the first visit for the total study population (n = 354) and for the three most frequently registered oral conditions.

	All patients	Patients with aphthous ulcers	Patients with oral candidiasis	Patients with herpes simplex infection
Number of cases	354	95	52	36
Numbers in age categories (%)				
0 to 4 years	71 (21)	17 (17)	24 (47)	11 (31)
5 to 9 years	29 (8)	12 (13)	3 (6)	6 (17)
10 to 19 years	29 (8)	13 (14)	1 (2)	4 (11)
20 to 39 years	90 (25)	27 (28)	6 (12)	8 (22)
40 to 59 years	71 (20)	13 (14)	8 (16)	4 (11)
>60 years	63 (18)	13 (14)	9 (17)	3 (8)
Management at presentation (n [%]) ^a				
Wait and see	141 (40)	42 (44)	5 (10)	18 (50)
Medication	159 (45)	52 (55)	47 (90)	17 (47)
Referral	60 (17)	2 (2)	1 (2)	1 (3)

^aTotal frequency may exceed 100% as more than one treatment may have been offered to a patient.

with a prescription. Medication was given to nearly all patients with oral candidiasis (90%), and this was an anti-fungal preparation for all but two of these patients. Fifty-five per cent of patients with aphthous ulcers received medication that was almost exclusively lignocaine gel.

In total, 60 (17%) patients were referred to a specialist, most often a primary care dentist (58%) or an oral surgeon (28%). Of the patients referred to the dentist, 70% had a dental or periodontal diagnosis. A further 15% had a denture-related ulcer.

Discussion

The cumulative incidence of oral complaints was estimated at 6.7 per 1000 per year, with a relatively high incidence in young children. A large variation was seen between practices. In addition to some random variation, this probably indicates that accuracy and the motivation to register cases varied between physicians. This may have resulted in an underestimation of the total incidence.

Most of the research carried out in the field of oral diseases has been in the form of prevalence studies, either in a healthy and asymptomatic general population,^{1,2,4} or in convenience populations (blood donors or students).^{5,6} The participating practices in our study were spread around The Netherlands, and the age distribution was almost identical to that in the Dutch population. This study did not include any patients who chose not to consult their doctor. Many lesions may, therefore, be under-reported in general practice.

All participating GPs received training before the start of data collection. Nevertheless, the quality of the diagnoses was unclear, and no attempt was made to assess inter-doctor variability. Some indications of incorrect diagnoses were found. For example, in a few cases of burning mouth syndrome (a diagnosis by exclusion), lesions were described or another diagnosis was made concurrently that could explain the symptoms. However, the aim of the study was not to validate diagnoses of oral pathology, but to observe the incidence of diagnoses as made by GPs in everyday care.

There was a low rate of referral, implying that GPs are comfortable with the diagnosis and management of most oral conditions. However, they seem reluctant to perform

minor surgery in the oral cavity (this was carried out in only six patients), and readily refer patients to a primary care dentist if a dental diagnosis is made. Perhaps some of these patients presented to the wrong healthcare professional for a dental diagnosis. This may be related to the lack of availability of dental care in some regions.

In conclusion, oral complaints occur frequently in general practice, especially in the young and the old. The complaints can often be dealt with by the GP alone, without the need for referral or further diagnostic tests.

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