



Research Article

PREVALENCE OF BENIGN MIGRATORY GLOSSITIS AND ANGULAR CHEILITIS IN A SAMPLE OF THE CELIAC POPULATION

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ABSTRACT

Introduction: Benign Migratory Glossitis (BMG) is characterised by irregular areas of loss of filiform papillae, surrounded by white margins. Angular cheilitis is a lesion that affect the angle of the mouth where both skin and mucosa may be involved and is characterized by maceration, erythema, and crust formation. Celiac disease (CD), is a condition in which genetically predisposed individuals exhibit damages in the small intestine villi as a consequence of an abnormal immune response subsequent to the ingestion of gluten. The aim of this study is evaluate the prevalence of BMG e Angular Cheilitis in a infant celiac population of 212 patients.

Materials and Methods: 212 patients, aged between 6 and 12 years old, were included in this study. Patients were examined every 4 months for a period of 2 years. Patients who developed at least once case of migrating glossitis and / or angular cheilitis were recorded.

Results: 19 patients (9%) were affected by benign migrant glossitis, 6 patients (3%) were affected by angular cheilitis.

Discussion: Our results are in agreement with those of a previous study. The relationships between these 2 oral conditions and celiac disease should be investigated to find out the causes and to find an appropriate therapy.

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INTRODUCTION

Benign Migratory Glossitis (BMG) is characterised by irregular areas of loss of filiform papillae, surrounded by white margins. The most important characteristic of this condition is that these areas vary widely in appearance, size, number, location, due to the healing of one edge and proliferation of another. They frequently disappear, then they recur and coalesce in variable proportions, so that the lesions appear to migrate (1). The increased prevalence of BMG among psoriatic patients and similar microscopic characteristics, support the idea that PS and BMG are associated conditions (1).

Psoriasis is clinically classified into two main groups: pustular and non-pustular lesions (2). The most common manifestations of the disease is a chronic desquamative plaque which involves the extensor surface of elbows, knees, and scalp. Additionally, nail involvement is usually seen and psoriatic arthritis occurs in some patients (2).

In a Brazilian recent epidemiological study, the prevalence of BMG is 7%, in a observed population of 6000 patients. 54% of the patients with BMG was woman, 86% was Caucasian with average age of 30.3 years, ranging from 1 to 90 years old (1). In a Iranian study, prevalence of oral lesion in psoriatic patients, such as fissured tongue and BMG is 46,9% (2).

Angular cheilitis is a clinical diagnosis of the lesion affecting the angle of the mouth where both skin and mucosa may be affected and is characterized by maceration, erythema, and crust formation (3). Microorganisms isolated from the angular cheilitis are *Candida* particularly, *Candida albicans*, *Staphylococcus aureus* and β -haemolytic streptococci (3). There are no recent data on the prevalence of this disease in the literature.

Celiac disease (CD), also known as “Coeliac sprue”, is an autoimmune disease in which genetically predisposed individuals exhibit damages in the small intestine villi as a consequence of an abnormal immune response subsequent to the ingestion of gluten (4). The diagnosis of CD is made from the clinical and histological findings, which also allows to classify this disease into four main types; classical, atypical, silent and latent (4).

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In the study of Bramanti *et al.* (5) the geographic tongue was found in 5/50 (10%) ascertained coeliac patients, 4/21 (19%) potential coeliac patients, and 2/54 (3.7%) control subjects. Cigic *et al.* found that 9 (15%) patients with geographic tongue were positive for IgA tTG and in those patients histological changes consistent with CD were confirmed by duodenal biopsy (6).

The aim of this study is evaluate the prevalence of BMG e Angular Cheilitis in a infant celiac population of 212 patients.

MATERIALS AND METHODS

212 patients were enrolled in this epidemiological study. Only subjects with histological diagnosis of celiac disease aged between 6 and 12 years old, were included in this study. Patients come from a geographical area of southern Italy and have been visited by a dentist and a dental hygienist. Patients were examined with a objective examen every 4 months for a period of 2 years. Patients who developed at least once case of migrating glossitis and / or angular cheilitis were recorded.

RESULTS

123 were male patient (58%), 89 were female patients (42%, fig 1). 187 out of 212 patients had not developed any case of benign migrating glossitis, or angular cheilitis, over the 2 years of observation. 19 patients (9%) were affected by benign migrant glossitis, 6 patients (3%) were affected by angular cheilitis (fig 2).

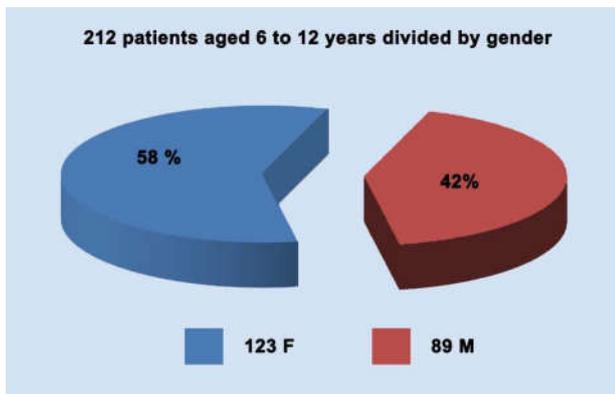


Fig 1 212 patients aged 6 to 12 years old divided by gender.

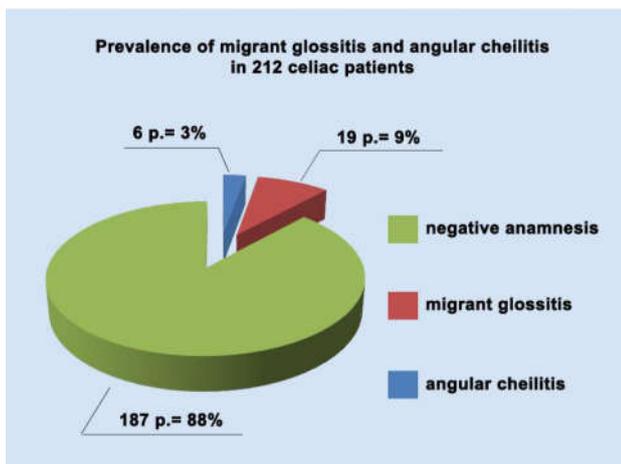


Fig 2 Prevalence of migrant glossitis and angular cheilitis in celiac patients.

DISCUSSION AND CONCLUSION

Several studies have analyzed the correlation between oral lesions and the presence of celiac disease. Some authors have studied the prevalence of aphthous lesions. Saraceno *et al.* found that RAS appear in 69% of the CD patients, compared to the 43% in the control group (7). In a work of Campisi *et al.* the prevalence of oral soft tissues lesions was 42% in the coeliac disease patients and 2% in controls (8).

Some authors investigated the linkage between enamel erosion and celiac disease. In a recent study of Cantenkin K *et al.* researchers concluded that the prevalence of enamel defects and recurrent aphthous stomatitis (RAS) was greater in celiac patients than in the control group. Enamel defects (in at least one permanent tooth) were observed in 12 out of 25 (48%) children in the CD group and four out of 25 children (16%) (9). Also Procaccini *et al.* have studied this phenomenon (10). An association between Oral Lichen Planus (OLP) and CD was found. The authors of a recent study confirmed the increased frequency of CD among OLP patients. Also they concluded that CD screening should be considered in OLP patients, since untreated CD can present many complications and reduce a patient's quality of life (11).

Very few studies are conducted on the prevalence of BMG and angular cheilitis in CD patients (5,6). Previous works had underlined the association between CD and other oral immune disorders. BMG had an uncertain etiopathology but is strictly connected with immune disorders (1). Our results are in agreement with those of Bramanti *et al.* (5). Angular cheilitis may appear in various forms; sometimes limited to the corner of the mouth, sometimes also the adjacent skin could be involved. It can also appear as a bilateral or monolateral lesion (3). Angular cheilitis is an infection disease. *S. Aureus* were found in 75.7% of angular cheilitis, *Candida* in 48.4%, and streptococci in 13% of the cases (3). Physical debility induced by cronic and immune inflammatory diseases often causes persistent infections.

The relationships between these 2 oral conditions and celiac disease should be investigated to find out the causes and to find an appropriate therapy and a protocol of prevention of the same.

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