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ABSTRACT:
Background: Oral candidiasis is one of the common fungal infection, affecting the oral mucosa. Prevalence of oral candidiasis in general population varies considerably. Hence; we conducted the present study to assess the prevalence of oral candidiasis in Birgunj population. Materials & methods: The present study included assessment of prevalence of oral candidiasis among subjects of known population. A total of 200 subjects were included in the present study. Percentage prevalence was oral candidiasis was calculated. Results: A total of 200 patients were included in the present study. Prevalence rate of oral candidiasis was seen in 4% of the patients. Conclusion: Oral candidiasis is present more commonly in patients with history of chronic antibiotic usage.

Key words: Oral Candidiasis, Prevalence.

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INTRODUCTION
Oral candidiasis is one of the common fungal infection, affecting the oral mucosa. These lesions are caused by the yeast Candida albicans. Candida albicans are one of the components of normal oral microflora and around 30% to 50% people carry this organism. Rate of carriage increases with age of the patient.1-3 Candida albicans are recovered from 60% of dentate patient’s mouth over the age of 60 years.4 Prevalence of oral candidiasis in general population varies considerably. Hence; we conducted the present study to assess the prevalence of oral candidiasis in Birgunj population.

MATERIALS & METHODS
The present study was conducted in the department of oral pathology of the dental institute and included assessment of prevalence of oral candidiasis among subjects of known population. Ethical approval was taken from institutional ethical committee and written consent was obtained after explaining in detail the entire research protocol. A total of 200 subjects were included in the present study. We included all the patients who reported to the institute for seeking dental treatment. Mouth mirror and probe were used for evaluating the oral cavity of the patients. Tongue blade was used for scrapping the oral cavity of the patients for testing the presence of oral candidiasis. All the results were recorded on the excel sheet. Percentage prevalence was calculated. All the results were analyzed by SPSS software. Univariate regression curve was used for assessment of level of significance.

RESULTS
A total of 200 patients were included in the present study. Out of which 100 were males and 100 were females. Mean age of the patients was 43.5 years. History of chronic antibiotic usage was seen in 2 patients. Prevalence rate of oral candidiasis was seen in 4% of the patients.

Table 1: Distribution of patients

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total patients</td>
<td>200</td>
</tr>
<tr>
<td>Mean age (years)</td>
<td>43.5</td>
</tr>
<tr>
<td>Males</td>
<td>100</td>
</tr>
<tr>
<td>Females</td>
<td>100</td>
</tr>
<tr>
<td>Prevalence (Patients)</td>
<td>8</td>
</tr>
</tbody>
</table>
DISCUSSION

Oral candidiasis is a common opportunistic infection of the oral cavity caused by an overgrowth of Candida species, the commonest being Candida albicans. The incidence varies depending on age and certain predisposing species. There are three broad groupings consisting of acute candidiasis, chronic candidiasis, and angular cheilitis. Risk factors include impaired salivary gland function, drugs, dentures, high carbohydrate diet, and extremes of life, smoking, diabetes mellitus, Cushing’s syndrome, malignancies, and immunosuppressive conditions.  

In the present study, we observed that prevalence rate of oral candidiasis was 4%. Martinez RFF et al obtained the prevalence of Candida carriers among patients with type 2 diabetes mellitus to identify the species of the yeast. Study design: It is an open, observational, descriptive, cross-sectional, and prospective study. They included voluntary patients from the National Diabetes Marathon and performed a blood glucose measurement, slitometry test, Gram-stained exfoliative cytology, and culture on Sabouraud dextrose agar and CHROMagar Candida TM. Results were analyzed using descriptive statistics. They examined 141 patients (mean age 57 years): 103 women (73%) and 38 men (26.9%). Exfoliative cytology was positive in 32 cases (23 with oral lesions); 78 had oral lesions but no Candida (93.9%). Candida was isolated in 58 patients (41.1%), 21 (45.6 %) had blood glucose greater than 126 mg/dl, and 37 (38.9%) had less than 126 mg/dl. The most frequent species was C. albicans (82.7%). Forty-two Candida carriers had salivary flow greater than 20 mm (72.4%), and 80 (97.5%) had xerostomia. Candida was isolated in 25 of 79 patients with dental prosthesis (31.6%), 9 of 15 were smokers (60%), and 22 of 71 had symptoms (30.9%). Prevalence of oral Candida carriers in patients with type 2 diabetes mellitus in Mexico was similar to that found in other countries; exfoliative cytology was effective in finding Candida; salivary flow rate, use of prosthesis, and presence of oral lesions and symptoms were similar in oral Candida carriers and negative patients. 

From the above results, the authors concluded that oral candidiasis is present more commonly in patients with history of chronic antibiotic usage.

REFERENCES


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Conflicts of interest: None declared

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