

*Oral manifestations,
Microbial study
And Enzyme analysis
In patients with peptic ulcer*

A thesis

***submitted to the council of the college of
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partial fulfillment of the requirements for
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Abstract

Background:

Peptic ulcer disease is one of the most common diseases affecting the gastrointestinal tract. It causes inflammatory injuries in the gastric or duodenal mucosa, with extension beyond the submucosa into the muscularis mucosa, (Chan *et al.*,2005).

The etiology of this condition are multifactorial and are rarely related simply to excessive acid secretion. Even though gastric ulcer is a common disease, a diagnosis can be difficult because it has a wide spectrum of clinical presentations, ranging from asymptomatic to vague epigastric pain, nausea, and iron-deficiency anemia to acute life-threatening hemorrhage,(Lai *et al.*,2006).

Aims of the study:

The aims of this study was to determine the prevalence of oral manifestations in the peptic ulcer patients, isolate and identify different microorganism (aerobic, anaerobic and fungi), from oral micro flora from patients with peptic ulcer and detect the enzymes level in saliva including alkaline phosphatase (ALP), total salivary protein (TSP) and lactate dehydrogenase (LDH) in relation to peptic ulcer and comparison with healthy control.

Subjects, materials and methods:

The study included 35 patients with peptic ulcer (21 male and 14 female), 15 individuals treated from peptic ulcer (10 male and 5 female) and third group of 20 healthy control (7 male and 13 female).

Results

The most frequent oral manifestations in the patients with peptic ulcer, in our study was burning mouth syndrome (44.6%), tooth erosion (29.8%) and aphthous ulcer (14.9%) respectively.

While angular cheilitis, bad odor and white coated tongue, were fairly frequent and present at (4.3%), (4.3%) and (2.1%) respectively.

No confirmed oral malignancy was detected in this study.

In the present study, the prevalence of the oral manifestations in peptic ulcer patients increased with age which was statistically non significant.

The micro-organisms isolated from oral cavity in peptic ulcer patients, treated group and healthy control were studied by various bacteriological and mycological methods, to identify different bacterial species and fungi.

Various species of bacteria were isolated, the main bacterial isolate were *Streptococcus viridians*, *Neisseria*, *Staphylococcus aureus*, *Corynebacterium*, *Klebsiella*, *Pseudomonas*, *Staphylococcus albus*, *Lactobacillus*, *Streptococcus mutans* and *Escherichia coli*.

Anaerobic bacteria such as *Peptostreptococcus* and *Bacillus* and also fungi such as *Candida albicans* were also identified.

Conclusions

The finding of this study show an obvious differences in the prevalence of micro-organisms between patients with peptic ulcer and healthy control.

A significant relationship of TSP and LDH enzymes in patients with peptic ulcer as compared to healthy control. However, slightly increased levels of ALP in peptic ulcer patients as compared to healthy control, but no statistically relationship was established.