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Prevalence Of Endo Perio Lesion- An Institutional Study

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Abstract

The relationship between endodontic and periodontal disease has been a subject of confusion and controversy for many years. Problems with the dental pulp and periodontium are responsible for over 50% of dental deaths. The aim of the study was to assess the prevalence of endoperineal injury among patients in the institution. This retrospective study included patients diagnosed with endoperineal injury between June 2019 and March 2020 in a private institution. Variables such as age, sex, and periintimal lesion site were obtained from patient records. Data were collated and statistically analyzed using IBM SPSS version 23 to obtain the results. Descriptive and inferential statistics were performed.In our study, 17.3% of 150 patients had periodontal pathology. The prevalence of endometriosis was 12.7% in men and 4.7% in women. When age and prevalence of endometriosis were analyzed, a high prevalence (5.3%) was observed in the age group of 31-40 years. Additionally, there was a statistically significant association between age and intraperineal injury, but there was no statistically significant association between sex and intraperineal injury.The current study showed that 17.3% of the study population had endometriosis. Additionally, the prevalence of endometriosis was higher in men (12.7%) and in the age group of 31-40 years.

Keywords: Endo Perio Lesion; Periapical Abscess; Periodontal Abscess; Periodontitis.

Introduction

Periodontitis is a chronic inflammatory process, which leads to the destruction of teeth surrounding periodontal bones and AL bones. There are various inflammatory mediators that die in inflammatory processes, such as cytokines and vascular peptides, leading to periodontal destruction. Periodontitis is diagnosed by clinical and radiological tests and can be classified into different types. Treatment depends on the cause, extent and severity of the periodontal disease and can be treated non-surgically or surgically. Endodontics treats caries, a process in which inorganic substances dissolve and organic substances are destroyed. If dental caries is left untreated for a long time, it can eventually affect the pulp. Eventually, pulp necrosis will occur, which will gradually progress to a periapical lesion. Diagnosis and treatment are different from the type of pulp reaction and the severity of the lesion.

Dontius and periodontal are closely linked, and disclosure of fabrics can lead to the participation of internal and periodontal. This can be difficult, as making the correct diagnosis is important in order to provide appropriate treatment.

Simling and Goldberg first described the relationship between periodontal disease and dental pulp disease in 1964. Since then, the final term has been used to explain lesions due to inflammatory products detected at various degrees in both periodontal terms and movements.

The term endodontic-periodontal disease describes etiopathology including lesions caused by

endodontic pathogens that spread coronally, involve the gingival margin or form fistulas or sinus tracts. Infection may also spread through marginal lesions and affect the apical periodontal tissues. Although the dental pulp and periodontium are distinct from each other, they are anatomically connected through an orifice. Periapical lesions of endodontic origin, or resulting from persistent attachment and bone loss at the alveolar ridge, or a combination of the above, are an important part of the differential diagnosis.

These lesions often make the diagnosis and prognosis of the affected teeth difficult for the clinician. The prevalence of endoperiolesion was studied in a European population, as well as its association with type II diabetes mellitus. Previously, our team had extensive experience working on various research projects in various disciplines. Therefore, the aim of our study was to evaluate the prevalence of internal perineal lesions.

MaterialsAndMethods

This retrospective cross-sectional study was conducted to assess the prevalence of periodontal disease among patients in a private healthcare institution in Chennai from June 2019 to March 2020. The study was initiated after approval from the Institutional Ethics Committee. The ethical approval number is SDC/SIHEC/2020/DIASDATA/0619-0320. A total of 150 patients were randomly recruited and data regarding age, sex, and oral examination were collected from the patient case records. The collected data were verified, tabulated, and analyzed using the Statistical Package for Social Sciences, SPSS version 23 for Windows, to obtain the results. Descriptive statistics (frequency distribution and percentages) and inferential statistics (chi-square test) were performed.

ResultsAndDiscussion

In our study, 17.3% of 150 patients had endometriosis. The study population was divided into different age groups: 21-30 years, 31-40 years, 41-50 years, 51-60 years, and 61-70 years. Six patients (4%) were aged 21-30 years, eight (5.3%) were aged 31-40 years, and six (4%) were aged 41-50 years.

Four patients (2.7%) aged 51-60 years and two (1.3%) aged 61-70 years had endorhythmic lesions. Endorhythmic lesions were most common in patients aged 31-40 years (5.3%) and least common in patients aged 61-70 years (1.3%). [Table 1]

Of the 150 patients, 96 (64%) were men and 54 (36%) were women. In an analysis of 26 patients with endometrial lesions, 19 (12.7%) were male and 7 (4.7%) were female [Table 2]. The association between different age groups and endoperiopathies was assessed using the chi-square test and was found to be statistically significant with a p-value of 0.000. [Figure 1] Additionally, the association between gender and endoperiopathies was assessed using the chi-square test and was found to be statistically non-significant with a p-value of 0.289. [Figure 2]

In this retrospective study, we evaluated the prevalence of periintimal lesions. Of 150 patients, 26 (17.3%) had endometriosis. The research conducted by ISSAC et al has evaluated the end -period

lesion rate of II diabetic patients, and has found that there is 18 % of the end -oriented lesion rate.

The research by Grudianov and others showed 17.78 % of the illness rate.

Table1.Tableshowingdistributionofstudyparticipantsbasedondifferentagegroups.Theendoperiolesionwereinhigherprevalenceamong31-40years(5.3%)andleastamong61-70years(1.3%).

Agegroups(years)	Numberofpatientswithendoperiolesionn(%)	Numberofpatientswithoutendoperiolesionn(%)	Totaln(%)
21-30	6 (4%)	89 (59.3%)	95 (63.3%)
31-40	8 (5.3%)	26 (17.3%)	34 (22.7%)
41-50	6 (4%)	3 (2%)	9 (6%)
51-60	4 (2.7%)	2 (1.3%)	6 (4%)
61-70	2 (1.3%)	4 (2.7%)	6 (4%)
Total n (%)	26 (17.3%)	124 (82.7%)	150 (100%)

Table2.Tableshowingdistributionofstudyparticipantsbasedongender.Males(12.7%)hadhigherprevalenceofendoperiolesionthanfemales(4.7%).

Gender	Numberofpatientswithendoperiolesionn(%)	Numberofpatientswithoutendoperiolesionn(%)	Totaln(%)
Males	19 (12.7%)	77 (51.3%)	96 (64%)
Females	7 (4.7%)	47 (31.3%)	54 (36%)

Total n (%)	26 (17.3%)	124 (82.7%)	150 (100%)

Figure1.Bargraphshowstheassociationbetweendifferentagegroupsandendoperiolesion.Xaxisrepresents differentagegroupsandYaxisrepresentspercentagedistributionofpatientswith(blue)andwithout(green)endoperiolesion.Theendoperiolesionwasmoreprevalentamong31-40years(5.3%)andleastprevalentamong61-70years(1.3%).Theassocia-tion between different age groups and endo perio lesion prevalence was statistically significant. (Chi-square test; p=0.000).

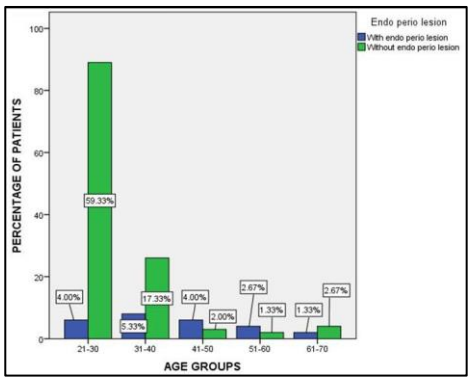
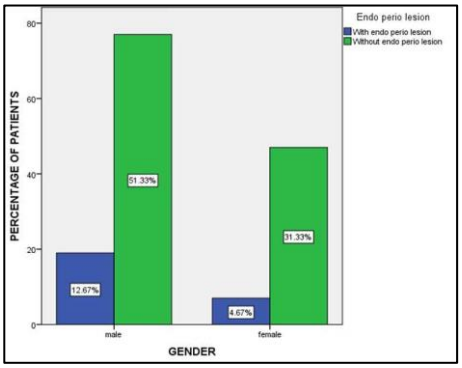


Figure2.BargraphshowstheassociationbetweengenderandendoperiolesionXaxisrepresentsgenderandYaxisrepre-sentspercentagedistributionofpatientswith(blue)andwithout(green)endoperiolesion.Theendoperiolesionwasmoreprevalentamongmales(12.67%)thanfemales(4.67%).Theassociationbetweengenderandendoperiolesionprevalencewas statistically not significant. (Chi-square test; p=0.289).



endo perio lesion. Emrich et al suggested that there was an increased risk for progressive periodontal destruction in patients with periapical lesions. Our results are consistent with previous studies.

In the present study, the prevalence of endoperio lesion was more common among 31-40 years old and was least common among 61-70 years old. Study done by Kavathapu et al assessed the management of endo perio lesion in patients with aggressive periodontitis and there was a higher prevalence of endo-perio lesion among 31- 40 years. Study done by Viswanath et al suggested different treatment modalities for managing endo perio lesion and found that there was higher prevalence of endo perio lesion among 31- 40 years. Our results are consistent with previous studies. Our institute is committed to high-quality, evidence-based research and has achieved excellence in various fields.

In this study, men had a higher prevalence of endometrial lesions than women. The study by Grudianov et al showed that the prevalence of periodontitis was higher in men than in women. The studies by Eke et al and Dye et al showed that the prevalence of periodontitis was higher in men than in women. Anerud et al. and Loe et al. studied the natural history of periodontal disease and found an association between periodontitis and gender, suggesting a predilection for men. Our results are consistent with previous studies. In this study, 17.3 % of the research groups showed the end lesion.

Conclusion

Within the limitations of the present study, it can be concluded that 17.3% of the study population had endo perio lesion. Also, prevalence of endo perio lesion was higher among males (12.7%) and among the age group of 31-40 years (5.3%).

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