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Original Research Article

Association of gingival diseases, epulis with types and factors

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ABSTRACT

Introduction: Oral and gingival diseases are vital in dental patients. In prosthodontics, gums and their condition is essential. Pathology in gums (enlarged gingiva) in mouth is a daily dental finding in population. It is a regular complaint in most people.
Aim and Objectives: To find out the types of gingival diseases in people.
Materials and Methods: 500 subjects above 20 years were chosen.
Results: People have gingival diseases but they consider it as part and parcel of life.
Discussion: Patients have to be made aware of gingival diseases as a problem and difficulty.
Conclusion: It is high time oral cavity get its due consideration regarding diseases of gums.

1. Introduction

Oral and gingival diseases are common in Indian population. Disorders and diseases of gums (enlarged gingiva) is a daily complaint of mostly patients. Gingival enlargement, a globally accepted terminology for an increase in the size of the gingival. [1–3]

Dental professionals need to identify and then guide the patient to seek necessary medical intervention. [4] Gingival enlargement is a common clinical problem, usually associated with specific conditions.

Aim of this study is to assess the state of gingival and types of gingival diseases in patients. Objective is to educate patients about healthy gums in their mouths. Clinical relevance is that gingival diseases specially swollen and bleeding gingival (enlarged gums) is an important oral problem and patients have to be made aware of its consequences.

2. Materials and Methods

500 patients above 20 years half from village and half who came to OPD in prosthodontics in a small hospital on outer of Malihabad in 2 months were studied. They were examined by basic diagnostic instruments and asked simple questions related to their oral hygiene. Then the results were tabulated.

3. Results

3.1. Enlarged gums

Table 1: Descriptive analysis of Enlarged Gums in study population (N=500)

Enlarged Gums	N	%
Group 1	250	50%
Group 2	218	43.6%
Group 3	32	6.4%
Total	500	100%

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Table 2: Descriptive analysis (N=500)

Enlarged Gums		**N (%)**
Group 1 (N=250)	Epulis	40 (16%)
	Neoplastic	15 (6%)
	Inflammatory	150 (60%)
	Mouth breathers	20 (8%)
	Drug	25 (10%)
Group 2 (N=218)	Genetic	5 (2.3%)
	Hormonal	85 (39%)
	Vitamin c	118 (54.1%)
	Systemic disease	10 (4.6%)
Group 3 (N=32)	False	25 (78.1%)
	Cyst	5 (15.6%)
	Granuloma	2 (6.3%)

Table 3: Descriptive analysis (N=500)

Age in Years		**N (%)**
Till 45 Years (N=373)	Inflammatory	150 (40.2%)
	Mouth breathers	20 (5.4%)
	Hormonal	85 (22.8%)
	Vitamin c	118 (31.6%)
	Epulis	40 (31.5%)
	Neoplastic	15 (11.8%)
	Drug	25 (19.7%)
Above 45 years (N=127)	Genetic	5 (3.9%)
	Systemic disease	10 (7.9%)
	False	25 (19.7%)
	Cyst	5 (3.9%)
	Granuloma	2 (1.6%)

Table 4: Descriptive analysis (N=500)

Gender		**N (%)**
Male (N=258)	Hormonal	5 (1.9%)
	Epulis	31 (12.0%)
	Inflammatory	72 (27.9%)
	Mouth breathers	11 (4.3%)
	Drug	17 (6.6%)
	Genetic	2 (0.8%)
	Vitamin c	85 (32.9%)
	Systemic disease	7 (2.7%)
	False	9 (3.5%)
	Cyst	3 (1.2%)
	Granuloma	1 (0.4%)
	Neoplastic	15 (5.8%)
Female (N=242)	Hormonal	80 (33.1%)
	Epulis	9 (3.7%)
	Inflammatory	78 (32.2%)
	Mouth breathers	9 (3.7%)
	Drug	8 (3.3%)
	Genetic	3 (1.2%)
	Vitamin c	33 (13.6%)
	Systemic disease	3 (1.2%)
	False	16 (6.6%)
	Cyst	2 (0.8%)
	Granuloma	1 (0.4%)
	Neoplastic	0 (0%)

It is seen that in this present study, 3 groups were formed in which 1st group had 50% participants, 2nd group had 43.6% and 3rd group had 6.4% participants. In group 1(commonest), 16% had epulis, 6% had neoplastic, 60% had inflammatory gingiva, 8% had mouth breathing habit and 10% took some drugs. In group 2(less common), it was seen 2.3% had some genetic problems,39% had hormonal gingival conditions, 54.1% had lack of vitamin c and 4.6% had some systemic disease. In group 3(least common), 78.1% had false gingival growth, 15.6% had cyst and 6.3% had granuloma. Age wise it was seen that till 45 years, 40.2% had inflammatory gingiva, 5.4% had mouth breathing habit, 22.8% suffered from hormonal disorders and 31.6% showed vitamin c deficiency. Above 45 years in 31.5% epulis was seen, 11.8% had neoplastic growth, 19.7% said they took drugs, 3.9% had it genetically, 7.9% suffered systemic disease, 19.7 had false gingival growth, 3.9%gave cyst appearance and 1.6% had granulomas. In males in 1.9% hormonal conditions were seen, 12% epulis seen, 27.9% had inflammatory gingiva, 4.3% were mouthbreathers, 6.6% took drugs,0.8% had genetic, 32.9% had vitamin c shortage, 2.7% suffered systemic diseases, 3.5% had false gingival growth, 1.2% had cysts, 0.4% had granuloma and 5.8% had neoplastic growth. In females, 33.1% had hormonal disorders, 3.7% had epulis, 32.2% had inflammatory gingiva, 3.7% had mouth breathing habit, 3.3% said they took drugs, 1.2% had genetic disorders, 13.6% showed lack of vitamin c, 1.2% had systemic diseases, 6.6% had false gingival growth, 0.8% showed cyst, 0.4% had granuloma and 0% had neoplasm.

4. Discussion

Gingival overgrowth may present as an unaesthetic sight to the patient and also to others. It is an absolute enigma to a clinician to diagnose the etiology of the overgrowth.[5] Gingivitis is referred to as an inflammatory reaction of the gingival caused by the bacterial plaque colonization on tooth surfaces and subsequent invasion of micro-organisms into the gingival sulcus.[6] Gingival hyperplasia is a multifactorial disease and drug induced gingival hyperplasia is an esthetically disfiguring overgrowth attributable to various medications.[7,8] Gingival enlargement or hyperplasia is an abnormal condition in which the gingival presents changes in volume and ranges from a slight hyperplasia of the interdental papillae to a growth in which the dental crowns remain completely covered by the altered tissue.[9,10] Chlorhexidiene mouth rinses, regular scaling, root planning and bit guard worn at night.[11]

The hyperplastic gingival usually presents normal color and firm consistency, with abundant stippling.[12] It may be plaque-induced or associated with systemic hormonal disturbances.[13] Gingival enlargement is a common clinical sign of the disease gingival.[14] The maintenance of treated cases should include meticulous homecare and professional

recalls.Souza If we want to treat gingival problems and avoid complications of periodontal therapy, it is necessary to have good knowledge of the cause of enlargement and the underlying pathologic changes and periodontal therapy techniques.[15] Excessive growth of gingival tissues in gingival disease is a frequent entity.[16]

In the initial mouth prepation phase, CHX gel has demonstrated suitable effects.[17] Periodontal prosthetic patient is best managed with joint consultation as a team consisting of Prosthodontist, periodontist and is frequently to include orthodontist, endodontist and oral surgeon. Throughout the course of the therapy the team should have a coordination with each other and patient as well so as each mode of treatment is planned carefully to attain highest success in treatment.[18] Patient cooperative is yet another aspect for good management of patients. Since it is a multidisciplinary approach, several appointments may be required to complete the course of treatment and mostly gingivitis is treated by following proper oral hygiene, like brushing your teeth twice a day, dental flossing, dental cleaning using mouthwash and dental checkup.[19] Erpenstein H did a study on the role of the prosthodontist in the treatment of periodontal disease and reported that if optimum prospects for oral hygiene have been created by good co-ordination between the periodontist and the prosthodontist, the prognosis in the maintenance phase is considerably improved.[20] Despite many investigations carried out to examine the failure and complications of fixed prosthesis, the present topic of studying the relationship between the fixed prosthontics and gingival problems was not done and much research is required in this field.[21] Abdul and Lyons mentioned that although periodontal factors do not usually have a direct effect on the survival of fixed prosthesis, a harmony between the prosthesis and the periodontium is critical, otherwise the aesthetics and the longevity of the prosthesis and the periodontium will be compromised.[22] The present study demonstrated that the initial level of oral hygiene was poor among the participants of all groups.[23] Dental patient compliance in maintaining also plays a major role in long term success.[24] The relationship between periodontal health and restoration of teeth is intimate and inseparable. For restoration to survive long term, the periodontium must remain healthy so that the teeth are retained.[25,26] There are many factors of periodontal health wearing RPD, however the most fundamental factors are recall appointment and oral and denture hygiene which are usually ignored in most of the practices.[27] The convergence of the biological and digital revolution with clinical dentistry and Medicine is changing and transforming diagnostics, treatment planning, procedures, techniques, therapeutics, biomaterials and predictable outcome of therapy. Sound periodontium is of utmost importance for the success of restorative therapy and maintenance of periodontal health for the long term success of prosthetic treatment.[28] To achieve successful treatment outcomes, periodontists and prosthodontist should co-operate in treatment plan, performance and maintenance.[29] Regular control dental examinations play a big role in the prevention of occurrence of epulis fissuratum.

5. Conclusion

Deviation from normal state is a disease itself. In mouth having diseased, enlarged gums is a big issue. All the factors should be studied and co-related to reach to a conclusion. A good case history has to be made and the patient needs to be dealt in the appropriate method. Prosthodontics comprises of removable, complete dentures RPDS and CDs, implants, crowns and bridges. For a successful treatment, healthy gingiva are mandatory. Often if patients ignore their oral hygiene, inflammation occurs resulting in gingivitis, if it is due to denture related injury then epulis is seen. If other causes are present related to drugs, systemic diseases, hormones then also gingivitis and gingival hyperplasia occurs. Periodontic and prosthodontic go hand in hand. It's high time the soft tissues get their due importance and are maintained healthy by the patients with help of dentists. Oral biosciences and gingival pathology is interconnected with prosthodontics. Proper care and attention is required by dentists and patients in this.

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7. Conflict of Interest

None declared.

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