

Oral Hygiene as a Risk Factor in Periodontitis

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Abstract

Dental plaque is the etiological factor for initiation of periodontal disease due to secretion of toxins and proteolytic enzymes by the microbial accumulation in the cervical region of teeth & sub gingival area.

Gingival inflammation will progress into the continuing destruction of supporting tissues like resorption of alveolar bone. Loss of attachment increase pocket depth if we don't remove the microbial dental plaque, by daily oral hygiene practice through mechanical tooth brushing of the person himself & periodic clinical examination to remove the plaque, calculus & other retentive factors to maintain the oral hygiene in a good manner.

The oral hygiene is considered as a risk factor in the prevention or progression of periodontal disease depending on daily removing of dental plaque by the person & professional recalling system clinically.

Key Words: Gingival inflammation, Dental plaque, patient, Iraq

Introduction

The aim of personal oral hygiene combined with professional cleaning by clinical parameters is to remove the dental microbial plaque. (1,2) The oral hygiene done by the subject include the mechanical tooth brushing, dental flossing, Interdental brushing & chlorhexidine mouth wash 0.2% combined with deep scaling, subgingival duration of bacterial groups, including the roots of infected teeth & polishing which done by the dentist clinically through periodic table once in month of at least. (3,4,5,6)

By these previous two steps we can maintain the oral hygiene in a good manner & prevention of the disease with treatment of periodontal lesion which include treatment of gingivitis, new attachment Level gain, decrease pocket depth, decrease tooth mobility & formation of new bone support of teeth. (8,9,10)

Even the periodontitis done by surgical interference, there should be a post-surgical maintain of oral hygiene by the patient combine with clinical recalling system by the operator to maintain The oral hygiene by motivation & give instruction to the patient about the oral hygiene by himself & periodic visit to the clinic scaling in order to remove the accumulation of

dental plaque continuously. (11)

this issue bears some limitations. In addition, previous studies have reported inconsistent findings in this regard. With this background in mind, the present study aimed to compare infertility-related stress among the infertile couples and its relationship with infertility factors.

Materials and Methods

1- Selection of 20 patients complaining from periodontitis.

2- Divided in 2 groups: test group & control group.

3-on base line. we record the following clinical parameters of the 2 groups.

a- Collection of dental plaque sample sub gingivally to identify the presence of micro - organisms by an immunological assay method which as follow: -

This method uses for detection of sub- gingival pathogens (antigen) using antibodies specific to that bacterial antigens. collection of plaque samples of sterile paper points (diluted) fixed to slide

(stained by incubation with antibodies)

this technique demonstrated that the presence of specific pathogens corresponded with increasing pocket depth.

this test is passed on antigen-antibody binding in the sub gingival dental plaque.

(b) At base line: -

1- Report the personal and hygiene practice.

2- Measurement of clinical periodontal examination by periodontal probe for each subject that include: plaque index, probing pocket depth, attachment level.

(c) data collection is obtained for each subject clinically for the presence of micro-organism subgingivally &the oral hygiene practice (at baseline) &then compare it with the results at the end of this study in the healing of periodontitis after following of good oral hygiene measurement of self-perform plaque control practice &by clinical recall

system Including the (control group) only.

But the (test group) which are not include this system of oral hygiene (personal &clinical) but they follow only the person method of hygiene without clinical follow up system and compare them with a control group.

Results

All subjects at baseline are subjected to plaque index (40%), measurement pocket depth (5mm), and the attachment level (1.34mm)

In test group: -

1- Plaque index: after 6 months was 35% Plaque index; after (1) year of the trial was 30%.

2- Pocket depth: at the beginning of the trial was 5mm Pocket depth at the end of the trial was 3.6mm.

3- The attachment level at first was 1.34mm

Control group

	1st month	2nd month	3rd month	6month	End of trial
Plaque index%	40%	30%	22%	14%	5%
Pocket depth (mm)	4.8mm	4.2mm	3.6mm	2.9mm	2mm
Loss attachment level (mm)	1.34mm	1.26mm	1.12mm	1mm	0.8mm

Test group

	1st month	2nd month	3rd month	6month	End of trial
Plaque index%	40%	38%	36.2%	35%	30%
Pocket depth (mm)	5mm	4.8mm	4.7mm	4mm	3.6mm
Loss of attachment level (mm)	1.34mm	1.3mm	1.28mm	1.2mm	1.12mm

The attachment level at the end of trial was 1.12mm

In control group: -1-plaque index:

1st month 40%

2nd month 30%

3rd month 22%

4th month 18%

Continue to reduce the percentage until it reaches 5% at the end of the trail

2- pocket depth: -

1st month 4.8 mm

2nd month 4.2 mm

3rd month 3.6 mm

4th month 3.1 mm

Continue to reduce the depth of the pocket until it reaches 2 mm at the end of the study.

3-the attachment level lose: -

1st month: 1.34 mm

2nd month: 1.26 mm

3rd month :1.12 mm

It continues to reduce the level of losing the attachment until it reaches 0.8mm at the end of the study.

Discussion

Despite that, there is a putative pathogen in the area of shallow subgingival pocket, but the recalling regular personal clinical oral hygiene status has a value in reducing the problem of progression of periodontitis. (12,14) This is a duo to continue removing the bacterial level of pocket depth. plaque index, attachment level at baseline & at the end of this study. (13) The risk of oral hygiene will be reduced by following the periodic program of removing the accumulation of dental plaque & examine the self-perform oral hygiene & clinical checking of the plaque remnants. (15,16)

Conclusion

Regular personal self-perform & clinical professional dental care are of essential factors to reduce the problem of periodontitis. This is done

by the regular periodic program for continuing to remove of bacterial accumulation of dental plaque in the shallow subgingival pocket depth by healing the attachment level & reducing the plaque index with the healing of periodontal problems.

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Ethical Issues : Not applicable.

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