Regina de Oliveira Costa

Avaliação da Relação do Lábio Superior e a Borda Incisal do Incisivo Central Superior

Brasília
2014

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Trabalho de Conclusão de Curso apresentado ao Departamento de Odontologia da Faculdade de Ciências da Saúde da Universidade de Brasília, como requisito parcial para a conclusão do curso de Graduação em Odontologia.

Orientador: Prof. Dr. João Milki Neto

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Aos meus pais, minha irmã e meu noivo Jonata, por todo amor, apoio, carinho, estímulo e compreensão nos momentos de angústia e ausência. Vocês foram os principais responsáveis em permitir que esta trajetória da graduação chegasse ao fim!

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EPÍGRAFE

"O sonho é uma fonte infinita de inspiração."
Luiz Tambucci

RESUMO

COSTA, Regina de Oliveira. Avaliação da Relação do Lábio Superior e a Borda Incisal do Incisivo Central Superior. 2014. Trabalho de Conclusão de Curso (Graduação em Odontologia) – Departamento de Odontologia da Faculdade de Ciências da Saúde da Universidade de Brasília.

Para o planejamento de reabilitações estéticas ou intervenções de cirurgia ortognática, é fundamental a obtenção de medidas faciais que relacionem tecidos duros e moles. O objetivo deste estudo foi avaliar a diferença da medida entre o incisivo central superior e o lábio superior, em repouso, em função de três posições corporais específicas: paciente deitado (180º em relação ao solo); paciente sentado (90º em relação ao solo) e paciente em pé (90º em relação ao solo). Foram avaliados 30 pacientes, de ambos os sexos, com idade entre 19 e 34 anos, possuindo oclusão Classe I de Angle. Os valores obtidos, nas diferentes posições corporais, foram tabulados e submetidos à ANOVA e teste de Tukey, com nível de significância de 1%. Os resultados apresentaram diferença estatisticamente significante entre as posições Deitado e Sentado e Deitado e Em Pé, com a posição deitada alcançando as maiores médias e em pé, as menores. O correto posicionamento do paciente, para análise estética ou planejamento cirúrgico, aumentará a previsibilidade do resultado a ser alcançado no tratamento odontológico.

ABSTRACT

COSTA, Regina de Oliveira. Assessment of the relationship of the upper lip and the incisal edge of the maxillary central incisor. 2014. Undergraduate Course Final Monograph (undergraduate dentistry) – Department of Dentistry, School of Health Sciences, University of Brasília.

For planning esthetic rehabilitation interventions or orthognathic surgery, it is essential to obtain measures that relate facial hard and soft tissue. The aim of this study was to evaluate the extent of the difference between the maxillary central incisor and upper lip at rest, according to three specific body positions: patient lying down (180 degrees relative to the ground); patient sitting (90 degrees from the ground) and patient standing (90 on the ground). 30 patients were evaluated, of both sexes, aged between 19 and 34 years, having Angle Class I occlusion. The values obtained in different body positions were tabulated and submitted to ANOVA and Tukey's test, with significance level of 1%. The results showed statistically significant difference between Lying and Sitting and Lying and Standing positions, with the lying position and reaching the highest average standing minor. Correct positioning of the patient for aesthetic analysis or surgical planning, increase the predictability of the outcome to be achieved in dental treatment.

SUMÁRIO

ARTIGO CIENTÍFICO

Este trabalho de Conclusão de Curso é baseado no artigo científico:
COSTA, Regina de Oliveira; MILKI NETO, João. Avaliação da Relação do Lábio Superior e a Borda Incisal do Incisivo Central Superior.
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FOLHA DE TÍTULO

Avaliação da Relação do Lábio Superior e a Borda Incisal do Incisivo Central Superior

Assessment of the relationship of the upper lip and the incisal edge of the maxillary central incisor

Regina de Oliveira Costa[1]
João Milki Neto[2]

[1] Aluna de Graduação em Odontologia da Universidade de Brasília.
[2] Professor Adjunto de Cirurgia Bucomaxilofacial da Universidade de Brasília (UnB)

Correspondência: Prof. Dr. João Milki Neto
Campus Universitário Darcy Ribeiro - UnB - Faculdade de Ciências da Saúde - Departamento de Odontologia - 70910-900 - Asa Norte - Brasília - DF
E-mail: jmilki@gmail.com Telefone: (61) 3245-1266

Resumo

Avaliação da Relação do Lábio Superior e a Borda Incisal do Incisivo Central Superior

Resumo

Para o planejamento de reabilitações estéticas ou intervenções de cirurgia ortognática, é fundamental a obtenção de medidas faciais que relacionem tecidos duros e moles. O objetivo deste estudo foi avaliar a diferença da medida entre o incisivo central superior e o lábio superior, em repouso, em função de três posições corporais específicas: paciente deitado (180º em relação ao solo); paciente sentado (90º em relação ao solo) e paciente em pé (90º em relação ao solo). Foram avaliados 30 pacientes, de ambos os sexos, com idade entre 19 e 34 anos, possuindo oclusão Classe I de Angle. Os valores obtidos, nas diferentes posições corporais, foram tabulados e submetidos à ANOVA e teste de Tukey, com nível de significância de 1%. Os resultados apresentaram diferença estatisticamente significante entre as posições Deitado e Sentado e Deitado e Em Pé, com a posição deitada alcançando as maiores médias e em pé, as menores. O correto posicionamento do paciente, para análise estética ou planejamento cirúrgico, aumentará a previsibilidade do resultado a ser alcançado no tratamento odontológico.

Palavras-chave

Cirurgia ortognática; Maxila; Posicionamento do paciente; Lábio; Incisivo

Relevância Clínica

A distância entre o lábio superior e a borda incisal do incisivo central superior é fundamental para o planejamento e resultado final de tratamentos odontológicos que envolvem estética e função. A obtenção da posição ideal para análise e intervenção possibilita previsibilidade quanto ao resultado.

Abstract

Assessment of the relationship of the upper lip and the incisal edge of the maxillary central incisor

Abstract

For planning esthetic rehabilitation interventions or orthognathic surgery, it is essential to obtain measures that relate facial hard and soft tissue. The aim of this study was to evaluate the extent of the difference between the maxillary central incisor and upper lip at rest, according to three specific body positions: patient lying down (180 degrees relative to the ground); patient sitting (90 degrees from the ground) and patient standing (90 on the ground). 30 patients were evaluated, of both sexes, aged between 19 and 34 years, having Angle Class I occlusion. The values obtained in different body positions were tabulated and submitted to ANOVA and Tukey's test, with significance level of 1%. The results showed statistically significant difference between Lying and Sitting and Lying and Standing positions, with the lying position and reaching the highest average standing minor. Correct positioning of the patient for aesthetic analysis or surgical planning, increase the predictability of the outcome to be achieved in dental treatment.

Keywords

Orthognathic surgery; Maxilla; Patient positioning; Lip; Incisor

INTRODUÇÃO

A posição da borda do incisivo central superior em relação a borda inferior do lábio superior é fundamental para o planejamento do tratamento em diversas áreas da odontologia como reabilitação oral, estética, cirurgia ortognática, ortodontia.

Estruturas como lábios, dentes e gengiva fazem parte desta relação, que podem sofrer mudanças ao longo da vida. O envelhecimento é um processo inevitável para os seres humanos, que pode modificar esta relação devido alterações celulares afetando a simetria e estética dos tecidos moles relacionados com os músculos e suas funções[1.]

A relação entre o lábio superior e as bordas incisais dos dentes anteriores superiores e inferiores criam um arranjo harmônico e agradável ao sorriso[2]. Na maioria dos tratamentos reabilitadores estéticos, esta relação é de fundamental importância para um bom o resultado. Na cirurgia ortognática por exemplo, ela é utilizada como referência para posicionar a maxila, definindo a exposição de dentes e gengiva o que pode impactar positivamente ou não no resultado final.

Harmonia é a relação de várias partes diferentes entre si que forma um todo. É certo que não há face perfeitamente simétrica; contudo, a ausência de assimetrias notórias, principalmente em áreas importantes, como o terço inferior, é necessária para uma boa estética facial. A simetria pode levar à monotonia, falta de expressão e não ser agradável como uma face com pequenas assimetrias. Essa harmonia deve estar presente não só na face, mas também no sorriso, pois hoje a beleza de um sorriso perfeito é muito exigida pela sociedade[3].

A altura da linha do sorriso é influenciada pelo sexo e pela idade. Existem evidências que as mulheres apresentam sorrisos mais altos do que os homens[4,5] e que a exposição dentogengival diminui com o avançar da idade [4]. Esta informação tem relevância

clínica, uma vez que a linha do sorriso diminui com o passar do tempo, principalmente em indivíduos do sexo masculino[6].
Sabe-se que, durante a posição de repouso dos lábios, a quantidade de exposição dos incisivos superiores apresenta valores de aproximadamente 2 a 4,5 mm nas mulheres e 1 a 3 mm nos homens[7]. Essa característica está diretamente relacionada com a aparência jovial do sorriso, quanto maior a exposição mais jovem a aparência, sendo esperada a sua diminuição ao longo da vida (pelo alongamento do lábio superior, devido ao processo de maturação e envelhecimento dos tecidos)[6,8,9].
As medidas e as fotografias foram realizadas com os pacientes na posição natural da cabeça[10,11,12,13]. Esta é a posição em que o indivíduo se encontra no dia-a-dia e está relacionada com a posição correta natural do corpo e o alinhamento da coluna cervical[14].

PROPOSIÇÃO

O objetivo dessa pesquisa é avaliar se há diferença entre medidas da borda incisal dos incisivos centrais superiores e a borda inferior do lábio superior, em pacientes Classe I de Angle.
Este trabalho se propôs a avaliar a seguinte questão:

1. Há diferença na medida da relação borda incisal/lábio superior nas diferentes posições corporais?

MATERIAL E MÉTODO

O trabalho foi realizado utilizando as medidas da distância da borda incisal dos incisivos centrais superiores e a borda inferior do lábio superior de 30 pacientes, universitários, na faixa etária entre 19 e 34 anos, de ambos os sexos, sendo 26 mulheres e 04

homens, Classe I de Angle com dentição natural de, pelo menos, 28 dentes. A coleta de dados foi realizada na Clínica de Ensino Odontológico do Hospital Universitário de Brasília. Todos os pacientes assinaram Consentimento Livre Esclarecido, tendo o trabalho sido aprovado pelo Comitê de Ética e Pesquisa com seres humanos da Faculdade de Medicina da Universidade de Brasília, sob o protocolo: 35215214.9.0000.5558.

Na obtenção da medida, foi utilizado um compasso de ponta seca e uma régua de precisão (Fig.1). Inicialmente, foram colhidas as medidas na boca com o compasso de ponta seca, posicionando uma extremidade no lábio superior (na região inferior) e outra, na borda incisal do incisivo central superior e imediatamente transferidas para a régua de precisão, sendo estes valores anotados na tabela (Tabela 1). As medidas foram tomadas na seguinte sequência: com o paciente posicionado deitado (180º); sentado (90º) e em pé (90º). (Fig. 2).

Foi solicitado que os pacientes permanecessem com o lábio superior em repouso, afastando o lábio inferior o suficiente para que as bordas incisais fossem observadas . As três medições de cada paciente foram realizadas durante sessão única.

Todos os dados coletados foram tabulados e submetidos em análise estatística.

RESULTADO

Os resultados, após análise estatística, estão apresentados nas Tabelas 1 e 2.

O teste de Tukey mostrou que há diferença estatística entre as posições Deitado e Sentado e Deitado e Em Pé, sendo $P<0,01$. As posições Sentado e Em Pé tiveram resultados estatisticamente iguais. Segundo a análise estatística, a posição deitado foi a que

mostrou maior exposição dentária: 5,79 mm; sentado :4,47 mm e em pé: 4,16 mm.

Tabela 1 - Tabela de análise de variância (ANOVA) para as posições deitado (D), sentado (S) e em pé (E):

FV	GL	SQ	QM	Fc	Pr>Fc
Posição	2	44.357227	22.178613	185.907	0.0000
Repetição	29	209.122400	7.211117	60.445	0.0000
Erro	58	6.919373	0.119300		
Total corrigido	89	260.399000			
CV (%)=	7,19				
Média geral:	4,8033333	Número de observações:		90	

Tabela 2 - Médias dos valores das posições deitado (D), sentado (S) e em pé (E), submetidos à análise estatística pelo teste de Tukey:

Posição	Médias
Deitado	5,79 a
Sentado	4,47 b
Em pé	4,16 b

DMS: 0,214572303359508 NMS: 0,01

Erro padrão: 0,0630606956907087

DISCUSSÃO

Na odontologia atual, a importância estética está aumentando significativamente e apesar da utilização de equipamentos tecnológicos, como computadores e câmeras fotográficas, a avaliação clínica do paciente é primordial para um resultado satisfatório e um bom planejamento estético, assim como a correta posição do paciente na cadeira odontológica.

As proporções entre os vários planos da face são importantes para definir a proporcionalidade da face e definir a estética facial[15]. O princípio da Proporção Aurea, na avaliação e no plano de tratamento, é benéfico no planejamento estético do sorriso. Matematicamente descrita como a proporção entre o maior e menor comprimento, tem sido usada, há muitos séculos, por artistas, matemáticos, arquitetos e engenheiros para estudar e desenhar a proporção na beleza da arte e da natureza[16].

Existem pontos de referência para traçar a linha media- na da face, como a glabela, a ponta do nariz, o filtro do lábio superior e a ponta do mento. A linha interincisiva deve coincidir com a linha mediana da face. Uma alteração desta linha deve ser observada com atenção, pois representa uma ruptura no equilíbrio das estruturas faciais, diminuindo a estética facial[17].

Numa visão frontal, a primeira proporção áurea extraída da altura facial total é a do tríquio ao canto do olho, representada pelo valor 1,0, e do canto do olho ao mento, que vale 1,618. Uma medida inversa, do mento à asa do nariz, correspondendo à secção menor 1,0, que está em proporção áurea com o segmento maior de 1,618 do tríquio à asa do nariz[18,19]. Estas relações podem oferecer à ortodontia, à cirurgia maxilofacial e à cirurgia plástica um ponto de referência[17].

É importante analisar as relações e proporções dos dentes anteriores e os tecidos circunvizinhos, pois isso é fundamental para estabelecer tratamentos restauradores satisfatórios[20].

As posições musculares peribucais variam de uma pessoa para outra e influenciam na exposição dos incisivos centrais superiores[21,22].

O excesso gengival maxilar durante o sorriso é motivo de estudo e preocupação entre muitos dentistas. Uma exposição gengival excessiva, conhecida como "sorriso gengival" ou "linha alta do sorriso," pode ser esteticamente desfavorável e considerada indesejável de acordo com o biotipo do paciente[16]. Isto pode acontecer por várias razões como, lábio curto ou excesso gengival ou excesso vertical de maxila.

A cirurgia ortognática é indicada para corrigir o excesso vertical de maxila, melhorando assim a harmonia facial e do sorriso. A posição dos incisivos centrais superiores em relação ao lábio superior é a informação mais importante usada para planejar um caso de cirurgia ortognática e posicionar a maxila tridimensionalmente em sua nova posição. A precisão do reposicionamento da maxila irá afetar positivamente o resultado cirúrgico[23].

Em casos de reabilitação oral por implantes, há uma série de requisitos a serem cumpridos. Essa relação determinada a relação do lábio e o quanto de coroa será exposta[24].

Esse trabalho analisa a posição do lábio superior em relação a borda do incisivo central superior, por meio de medidas feitas com compasso de ponta seca e régua de precisão. Essa relação foi analisada em três diferentes posições, as quais mostraram diferenças estatisticamente.

Houve uma divergência significativa nas médias dos resultados obtidos. Apesar de pequena, essa diferença pode contribuir para um resultado indesejável.

CONCLUSÃO

1) Há diferença significativa entre as posições Deitado e Sentado e Deitado e Em pé. Não há diferença significativa entre as posições Sentado e Em pé.

   A distância entre o lábio superior e a borda incisal do incisivo central superior é fundamental para o planejamento e resultado final de tratamentos odontológicos que envolvem estética e função. A obtenção da posição ideal para análise e intervenção possibilita previsibilidade quanto ao resultado.

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TABELAS

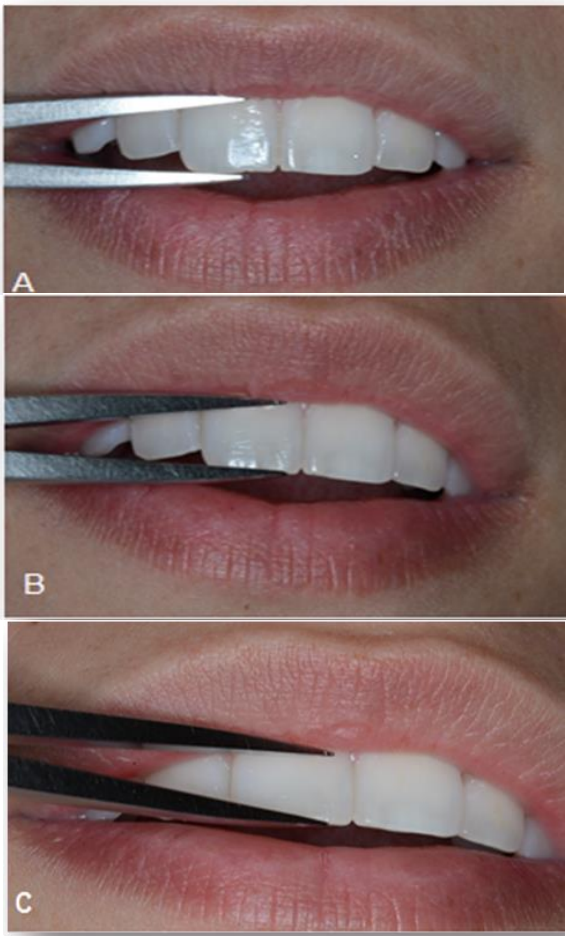
Tabela 1 – Dados dos alunos avaliados nas três posições diferentes:

Nome	Idade	Sexo	Semestre	Deitado (180º)	Sentado (90º)	Em pé (90º)
1	21	F	8	8,85	7,76	7,71
2	21	F	8	8,74	7,24	6,99
3	30	F	8	4,05	3,45	2,97
4	24	F	8	7,05	6,08	6,02
5	22	F	10	6,84	5,83	5,65
6	22	F	10	4,92	3,65	3,65
7	27	F	10	6,41	5,61	5,46
8	23	M	9	5,06	3,28	3,05
9	24	F	9	3,01	1,09	1,76
10	24	F	9	6,21	4,79	4,61
11	24	F	9	4,56	3,47	3,24
12	21	F	9	5,06	4,38	3,88
13	24	F	8	5,94	3,24	3,11
14	22	F	8	5,56	4,61	4,03
15	21	F	8	7,65	6,83	6,52
16	21	M	8	8,67	7,91	6,57
17	21	F	9	4,14	3,05	3,05
18	22	F	5	6,29	5,09	4,43
19	21	F	5	5,73	4,74	4,45
20	21	M	5	5,62	3,38	3,38
21	34	F	4	3,42	2,05	1,93
22	27	F	10	3,26	2,00	1,66
23	22	F	9	4,98	2,90	2,38
24	22	F	9	5,35	4,59	4,14
25	21	F	6	7,08	5,77	5,08
26	22	M	8	6,05	4,55	4,55
27	22	F	9	6,33	4,89	3,41
28	22	F	9	5,28	3,58	3,46
29	22	F	9	5,16	3,95	3,56
30	19	F	7	5,47	4,22	4,20

FIGURAS

FIGURA 1 – Compasso de ponta seca e régua de precisão.

FIGURA 2 – Diferentes posições corporais do lábio superior em respouso. A) Deitado; B) Sentado e C) Em pé.



ANEXOS

NORMAS DA REVISTA

The Editorial Process

The manuscripts will be reviewed for possible publication with the understanding that they are being submitted to one journal at a time and have not been published, simultaneously submitted, or already accepted for publication elsewhere.

The Editors review all submitted manuscripts initially. Manuscripts with insufficient originality, serious scientific flaws, or absence of importance of message are rejected. The journal will not return the unaccepted manuscripts.

Other manuscripts are sent to two or more expert reviewers without revealing the identity of the authors to the reviewers. Within a period of eight to ten weeks, the contributors will be informed about the reviewers' comments and acceptance/rejection of manuscript. Articles accepted would be copy edited for grammar, punctuation, print style, and format. Page proofs will be sent to the first author, which has to be returned within five days. Correction received after that period may not be included. All manuscripts received are duly acknowledged.

Types of Manuscripts and word limits

Original research articles
Randomised controlled trials, intervention studies, studies of screening and diagnostic test, outcome studies, cost effectiveness analyses, case-control series, and surveys with high response rate. Up to 2500 words excluding references and abstract.

Short Communication
Up to 1000 words excluding references and abstract and up to 8 references. A short communication contains only a short report of the case (only pertinent details) and a short discussion and references upto a maximum of 8. Number of figures should be restricted to a maximum of 6.

Case reports
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Journal references

Standard journal article
Kulkarni SB, Chitre RG, Satoskar RS. Serum proteins in tuberculosis. J Postgrad Med 1960; 6:113-120.

Volume with supplement
Shen HM, Zhang QF. Risk assessment of nickel carcinogenicity and occupational lung cancer. Environ Health Perspect 1994; 102 Suppl 1:275-282.

Issue with supplement
Payne DK, Sullivan MD, Massie MJ. Women's psychological reactions to breast cancer. Semin Oncol 1996; 23(1, Suppl 2):89-97.

Books and Other Monographs

Personal author(s)
Ringsven MK, Bond D. Gerontology and leadership skills for nurses. 2nd ed. Albany (NY): Delmar Publishers; 1996.

Editor(s), compiler(s) as author
Norman IJ, Redfern SJ, editors. Mental health care for elderly people. New York: Churchill Livingstone; 1996.

Chapter in a book
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