Evaluation of the effectiveness of facial taping to reduce rhinoplasty postoperative edema and ecchymosis

Bruna Carla Rodrigues De Andrade Lara[a,b],
Ana Paula Chornobay[c],
Marcieli Camparoli Martins De Oliveira[d],
Elenize Aggio De Araújo[e], Marília Amarílis Ferreira Brasil[f],
Mateus Mattioni[f],
Maria Theresa De Oliveira Costa Ramos Patrial[g],
Fábio Fabrício Maniglia[g,h,*]
[a] *Instituto de Previdência dos Servidores do Estado de Minas Gerais (IPSEMG), Belo Horizonte, MG, Brazil*
[b] *Fellowship de Otorrinolaringologia do Hospital Paranaense de Otorrinolaringologia (IPO), Curitiba, PR, Brazil*
[c] *Hospital Universitário Cajuru, Curitiba, PR, Brazil*
[d] *Fisioterapia Dermatofuncional pelo Conselho Federal de Fisioterapia e Terapia Ocupacional (COFFITO)/Associação Brasileira de Fisioterapia Dermatofuncional (ABRAFIDEF), Brazil*
[e] *Pós-graduação em Fisioterapia Dermatofuncional pela Universidade Positivo, Londrina, PR, Brazil*
[f] *Radiologista Titular pelo Colégio Brasileiro de Radiologia, Brazil*
[g] *Universidade Federal do Paraná (UFPR), Curitiba, PR, Brazil*
[h] *Plástica Facial do Hospital Paranaense de Otorrinolaringologia (IPO), Curitiba, PR, Brazil*
E-mail address: fabiomaniglia@hotmail.com
(F.F. Maniglia)

Objectives: To assess whether facial taping is effective in reducing edema and ecchymosis in the postoperative period of primary rhinoplasty and how satisfied patients are with the use of this material.

Methods: This study was approved by the Institution's Human Research Ethics Committee through authorization no. 47968721.1.0000.5529. Prospective, longitudinal, interventional and analytical study in which patients undergoing primary rhinoplasty were divided into three groups. Group 1: control group, in which a routine dressing was performed; Group 2: routine dressing was performed and taping was applied at 10% tension; and Group 3: routine dressing was performed and taping was applied at 75% tension. Patients were photographed, answered the Rhinoplasty Outcome Evaluation (ROE) and Nasal Obstruction Symptom Evalution (NOSE) questionnaires, and underwent facial ultrasound preoperatively and in the first week after surgery. Facial image capture was performed with a thermographic camera one week after surgery. After 30 days, all patients completed the ROE and NOSE questionnaires again.

Results: 14 female patients were recruited, aged between 18 and 40 years, 3 from Group 1 (Control), 6 from Group 2 (taping at 10% tension) and 5 from Group 3 (taping at 75% tension). Due to the small number of cases, statistical tests of comparison and correlation between the groups were not applied. Only one patient developed a cutaneous hypersensitivity reaction, requiring the removal of the taping on the fourth day, but this was maintained in our study. All patients had higher ROE scores after the first week, as well as worsening of the obstruction, which was more significant in Group 1. Patients in Groups 2 and 3 had a lower temperature in the regions evaluated by thermography in the postoperative period in compared to the control group. All patients who used taping believe that this material helped to contain the edema and the formation of ecchymosis. As for satisfaction with nasal aesthetics, through the ROE questionnaire, there was an improvement in all groups, being even more expressive at the end of the first month, as the results showed. The increase in satisfaction with nasal aesthetics was a little less expressive in Group 2.

Discussion: The performance of rhinoplasty has changed significantly over the years and advances in surgical techniques have been possible, mainly, due to a better understanding of the anatomical structures and studies of great surgeons. As with any surgical procedure, there are risks of related complications. Among them, ecchymosis and edema which, because they are expected, are not necessarily described as complications. Although temporary and expected, these changes generate anxiety for the patient, even though the surgeon has advised on the favorable evolution during the first two postoperative weeks.

Conclusion: Taping is a practical, inexpensive and easy way to help in the rhinoplasty recovery process. This material may have a satisfactory result in the reduction of periorbital edema and ecchymosis in the postoperative period of primary rhinoplasty, in addition to contributing to less postoperative nasal obstruction when applied with a tension of 10%, bringing comfort and satisfaction to the patient. Further studies are needed to prove its benefits according to objective parameters through statistically significant data.

Keywords: Taping; Rhinoplasty; Post-operative; Edema.
https://doi.org/10.1016/j.bjorl.2022.10.005

Evaluation of the perception of olfactory dysfunction after Covid-19 infection and its impacts

Larissa da Silva Conceição[a,*],
João Victor Mariano da Silva[b], Rafael Ferri Martins[b],
Juliana Bello Baron Maurer[c]
[a] *Hospital Paranaense de Otorrinolaringologia (IPO), Curitiba, PR, Brazil*
[b] *Fellowship em Otorrinolaringologia no Hospital Paranaense de Otorrinolaringologia (IPO), Curitiba, PR, Brazil*
[c] *Departamento de Bioquímica e Biologia Molecular na Universidade Federal do Paraná (UFPR), Curitiba, PR, Brazil*
E-mail address: conceicao.larissac@gmail.com
(L. da Silva Conceição)

Objectives: The present study aims to assess whether or not there is a correlation between the degree of olfactory dysfunction and the affected individual's perception of the impacts of such a deficit.

Methods: This research was approved by the Research Ethics Committee under number 47193821.5.0000.5529. The study is based on the evaluation of patients aged 18–65 years, with a history of Covid-19 infection associated with a complaint of altered smell that started during the acute phase of the disease and continued 1 month after the onset

of symptoms. The inclusion criterion was the existence of proof of infection by Covid-19 through previous RT-PCR, performed during the acute phase of symptoms. Patients with a history of pre-existing hyposmia to Covid-19 infection, as well as individuals with chronic rhinosinusitis, a history of traumatic brain injury, skull base surgery or neurodegenerative diseases were excluded.

Results: The study included 20 patients with complaints of persistent smell alteration, with a minimum time of 1 month after the acute infection by Covid-19. The age group of the participating individuals ranged from 18 to 58 years, with a mean of 40.1 (±11.6) years. It is observed that, during the interview, half of the patients (50%) reported no perception of progressive improvement since the acute condition, and an equal number of patients (50%) had already started some treatment for the olfactory deficit under medical supervision. or not, the treatments being reported: olfactory training with homemade substances (15%), olfactory training with 4 pre-defined odors (25%) and medications (35%). Among those who reported the use of medication, the use of topical nasal corticosteroids alone (28.6%), alpha lipoic acid alone (28.6%) and the association of topical nasal corticosteroids and alpha lipoic acid (42.9%) stand out. It is shown that 45% of the participants reported a previous situation of exposure to danger due to the olfactory deficit, namely, the consumption of inappropriate food (44.4%), the non-perception of exposure to the flammable substance (22.2%) and non-perception of a nearby burning object (11.1%), in addition to the consumption of inappropriate food and non- perception of exposure to exposure to a flammable substance when reported by the same individual (22.2%). There was a report of hyposmia in all participating patients, considering that this complaint represented an inclusion criterion for the present study, although there was an association with parosmia (30%), phantosmia (50%) and taste alteration (75%). When asked to give a score on a one-dimensional scale of 0-10 for their olfactory function, participants reported scores that ranged from 1 to 7, with a mean of 3.7. The grades given for the degree of overall perceived impact ranged from 2 to 10, with an average of 6.0. Statistical analysis with estimation of Spearman's correlation coefficient showed a direct correlation between the low scores given for smell in the patient's perception and lower values in the total score of the olfactory test ($p < 0.003$; r 0.63).

Discussion: Smell is a very important sense in the individual's interaction with the environment that surrounds him. This sense allows the identification of dangerous situations, awakens memories, helps the perception of flavors and plays an important role in interpersonal interactions. Thus, losses in this function have a great potential to impact the quality of life of the affected person, and may, for example, change diet habits, increase exposure to risk situations and generate emotional suffering.

Conclusion: The year 2021 was marked not only by the emergence of new cases of infection by Covid-19, but also by the recognition of sequelae left by the disease and the rehabilitation of patients affected by them. In this context, olfactory dysfunction stands out, which despite being short-lived in most cases, can be long- lasting and generate great compromise in the quality of life and safety of the individual.

Keywords: Olfactory impairment; Hyposmia; Covid-19.

https://doi.org/10.1016/j.bjorl.2022.10.006

Study of the otoprotective effect of dexametasone in ototoxicity induced by cisplatin in rats

Isabelle Oliveira Jataí Capelo, Marcos Rabelo de Freitas*
Departamento de Otorrinolaringologia, Universidade Federal do Ceará, Fortaleza, CE, Brazil
E-mail address: marcosrabeloufc@gmail.com (M.R. de Freitas)

Objective: To evaluate the protection capacity of dexamethasone against the ototoxicity of cisplatin through the functional evaluations by brainstem evoked response audiometry (BERA) and morphological by optical microscopy.

Methods: Male Wistar rats were divided into four groups: 1. Control: 06 animals received saline intraperitoneal (IP) 8 ml/kg/day for four days; 2. CDDP + D15: 11 animals received dexamethasone 15 mg/kg/ day via IP and 90 minutes (min) after 8 mg/kg/day of cisplatin via IP for four days; 3. CDDP + D20: 07 animals received 20 mg/kg/day of dexamethasone via IP and 90 min after 8 mg/kg/day of cisplatin via IP for four days; 4. C + CDDP: 11 animals receive 8 ml/kg/day of saline via IP and 90 min after 8 mg/kg/day of cisplatin via IP for four days.

Results: Based on the results of this study, dexamethasone at the dose of 15 mg/kg/day was significantly protected against ototoxicity of cisplatin by means of the functional evaluation by BERA and morphological, through the preservation of vascular stria. There was no protection against systemic toxicity, evaluated through animal weight, with the use of corticosteroids.

Conclusion: Dexamethasone at a dose of 15 mg/kg/day protected against ototoxicity by cisplatin in functional evaluation by BERA and morphological by optical microscopy, but did not protect against systemic toxicity.

Keywords: Ototoxicity; Cisplatin; Dexamethasone.

https://doi.org/10.1016/j.bjorl.2022.10.007

How many maneuvers are required for the effective treatment of posterior duct canal bppv ductolithiasis

Nátalie Emy Yvamoto,
Mônica Alcantara de Oliveira Santos*,
Patrícia Soares Montemagni
Departamento de Otorrinolaringologia da Irmandade da Santa Casa de Misericórdia de São Paulo, São Paulo, SP, Brazil

Objectives: To prospectively and randomly assess the number of Epley maneuvers necessary for the treatment of patients with posterior canal BPPV (ductolithiasis).

Methods: Fifty-nine patients were collected in the Otorhinolaryngology Department of the Tertiary Hospital of São Paulo and randomized in advance into 4 groups: Group