

in those with polyposis (42.11%) ($p=0.1$). The prevalence of patients with eosinophils >250 cells/ μL was 69.54%, higher in patients with polyposis (70.77%) than in those without polyposis (61.90%) ($p=0.41$). The median of serum eosinophilia was 390 cells/ μL , higher in patients with polyposis (423.5 cells/ μL) than in those without polyposis (310 cells/ μL) ($p=0.03$). The prevalence of patients with IgE >100 IU/mL was 55.74%, higher in patients with polyposis (56.88%) than in those without polyposis (46.15%). The median dose of serum IgE was 154 IU/mL, being 158 IU/mL in patients with polyposis and 50 IU/mL in patients without polyposis ($p=0.1$).

Conclusion: There was no relationship between phenotypic and endotypic classifications, because both patients with and without polyposis presented type 2 inflammatory response markers.

Keywords: Sinusitis; Phenotype; Th2 cells.

<https://doi.org/10.1016/j.bjorl.2022.10.027>

Risk factors for laryngotracheal injury in patients with COVID-19 submitted to orotracheal intubation

Letícia Félix, Gabriel de Souza Mares, Lara Freire Bezerril Soares, Sérgio Roberto Nacif, Romualdo Suzano Louzeiro Tiago*

Serviço de Otorrinolaringologia do Hospital do Servidor Público Estadual de São Paulo "Francisco Morato de Oliveira" (HSPE-FMO)/Setor de Laringologia e Cirurgia Cervicofacial, Instituto de Assistência Médica ao Servidor Público Estadual de São Paulo (IAMSPE), São Paulo, SP, Brazil

E-mail address: romualdotiago@uol.com.br (R.S. Tiago)

Objective: To evaluate the risk factors for the development of laryngotracheal lesions patients with COVID-19 undergoing orotracheal intubation (IOT).

Method: A prospective cohort was evaluated and approved by the Research Ethics Committee of the institution. Consecutive patients diagnosed with COVID-19 were evaluated for molecular test of RT-PCR, hospitalized in a tertiary hospital, in the period of March 1 to 31 October 2020, who required IOT. Patients who were discharged were called for outpatient follow-up and examination of the endoscopic.

Results: 1357 patients diagnosed with COVID-19 were hospitalized confirmed by molecular rt-PCR test in a nasal swab. IOT for ventilation mechanics was required in 421 patients (31%). In patients undergoing IOT, the outcome found was: hospital discharge – 172 (40.9%); death – 249 (59.1%). The evaluation outpatient videoendoscopy was performed in 95 patients (55.2%), on average 100 days after extubation. Statistical significance was observed for the development of laryngotracheal lesion patients who presented at the time of hospital admission the following factors: increase in leukocyte count (leukocytosis) with a reduction in lymphocyte count (lymphopenia), hypoalbuminemia, increased arterial lactate, increased troponin and increased total bilirubin; size of the endotracheal tube; indication of pronation during the IOT period; and increased leukocyte count, D-dimer, TP and INR on the date of IOT.

Conclusions: We observed a higher risk for the development of laryngotracheal injury patients who presented at hospital admission the increase in the leukocytes (leuko-

cytosis) with reduced lymphocyte count (lymphopenia), hypoalbuminemia, increased arterial lactate, increased troponin and increased total bilirubin. Patients who used a larger endotracheal tube and were submitted to the pronation position, as well as patients who at the time of IOT increased inflammatory reactivity (increase in leukocyte count) or developed coagulation disorders (increased D-dimer, TP and INR), at higher risk for the development of laryngotracheal injury.

Keywords: COVID-19; SARS-CoV-2; Laryngotracheal synthesis after intubation; Larynx.

<https://doi.org/10.1016/j.bjorl.2022.10.028>

Comparative magnetic resonance analysis of olfactory bulb of individuals with post-COVID anosmia 19

Inaê Mattoso Compagnoni^{a,*}, Fabiana Cardoso Pereira Valera^a, Wilma Terezinha Anselmo Lima^a, Antonio Carlos dos Santos^a, Edwin Tamashiro^a, Marcel Menon Miyake^b, Marco Aurélio Fornazieri^c, Guilherme Henrique Mitikami Fenolio^d

^a *Hospital das Clínicas de Ribeirão Preto, Ribeirão Preto, SP, Brazil*

^b *Santa Casa de São Paulo, Ribeirão Preto, SP, Brazil*

^c *Universidade Estadual de Londrina (UEL), Londrina, PR, Brazil*

^d *Hospital das Clínicas, Ilhéus, BA, Brazil*

E-mail address: naemc22@gmail.com (I.M. Compagnoni)

Introduction: The world has seen an uprise of olfactory disorders during the last years of COVID-19 pandemic, and unlike other infectious diseases, this was a more permanent alteration.

Objective: Assess olfactory bulb region through magnetic resonance imaging in individuals that persisted with olfactory disorder after COVID-19 infection.

Method: Retrospective observational study with patients with persistent olfactory disorder after COVID-19 infection (hyposmia/anosmia). Subjects underwent CCCRC olfactory testing, nasal endoscopy, and MRI. Study group was then compared to a control group, with individuals from 18 to 65 years, with no olfaction complain, and that were submitted to MRI before 2020 (pandemic period).

Results: Study group was of 59 adults, mean age of 44.9 (± 7.4), with a slight superior number of women (64.7%). Control group has 42 individuals with mean age of 40.3 and with a slight male predominance (52.4%). In the control group, the olfactory bulb mean size was of 53.6 mm³, ranging from 20.4 mm³ to 139.7 mm³. Study group had the following results: mean of 43.8 mm³, ranging from 18.4 mm³ to 90.8 mm³, with p value of 0.0225.

Conclusion: These results suggest that COVID-19 infection can be related to alterations of olfactory bulb structure that can explain persistence of olfactory.

Keywords: Anosmia; Coronavirus; COVID-19; SARS-CoV-2; Olfactory bulb.

<https://doi.org/10.1016/j.bjorl.2022.10.029>