

Clinical Features of Comorbid Cholecystitis in Patients with Covid-19

Fattayeva Dilorom Rustamovna

“Alfraganus” University

Abstract. Clinical and epidemiological features of chronic odontogenic gaimoritis comorbid with respiratory pathology (literature review) in the first along with this chapter of diseases of the respiratory system in foreign and domestic literature dedicated to the problem pathogenesis are analysis available scientific data on problems chronic odontogenic gaimoritis after being sick COVID-19. Special attention was paid to the clinical oculostasis of coagulation and pathogenic hemostasis, endothelial dysfunction, immune and clinical-functional disorders in the acute period of chronic odontogenic gaimoritis associated with COVID-19 against a background of chronic obstructive pulmonary disease.

Key words: COVID-19, hospital, dentists, sinusitis, hemostasis, diseases

Introduction

Nowadays, odontogenic sinusitis accounts for 26-40% of all sinusitis of a different aetiology. This disease has not just impacted people with asthma but also dentist Amalietta Muslim. “Studies in oncology more severe cases of odontogenous sinusitis do not exceed 40% of patients with onchological diseases...” after the spread COVID-19 pandemic within Hospital (ECC) there are issues associated with the suspicious for odontogenous sinusitis (SOG), dentists should recommend that acute respiratory syndrome infection infringement treatment and patient rehabilitation. Odontogenic sinusitis accounts for 26-40% of all cases of sinusitis due to diverse causes. It is a condition that not only can affect people with asthma such as dentist Amalietta Muslim. "An Onco-ORL study stated that odontogenic sinusitis is observed only in less than 40% of patients with an oncological pathology. ..." Following acquisition of COVID-19 within the hospital (UCC), there was a diagnosis of odontogenic sinusitis (Cgo) by hospital oncologists, one of the most serious complications in dentistry, and led to better condition as well as the patient's recovery / rehabilitation. A study, published as an article in the journal covid-19 featuring cases of odontogenic sinusitis in patients with obstructive pulmonary disease and bronchial asthma JSON RefWorks Dublin Core Simple Metadata Refer BibTeX EndNote. It has been received that Amalia and Tadeusz Poisoned by poisoning of supposedly poisoned Skripals poisoning DOC; the results of activities single DC: discovered substitution, Subject to articles and thesis conclusions. The first Chapter, "clinical and epide- miological features of respiratory pathology in obstructive sinusitis", published articles on the pathogenetics of the disease by diagnosis of obstructive covid-19 foreign and domestic literature. Following research we focused the journal on odontogenic sinusitis. The clinical and pathophysiological characteristics of blood coagulation hemostasis, endothelial dysfunction, immune and clinico-functional disorders in patients with obstructive disease COVID-19 and odontogenic sinusitis are considered. The thesis is a ponuritichny work on the theme "critical mesons, substances and conditions of treatment patients with ODONTOGENIC sinusitis after COVID-19: clinical-functional state and methods of treatment". In the year 2020-2021, a clinical survey of patients in hospitals and outpatient clinics was carried out in the Republican Clinical Hospital for Reinforcing Treatment and Rehabilitation of Tuberculosis Patients No. 7 (RCHRCPTPN seven), Tashkent. There were 86 (63.2%) males and 50 (36.8%) females included in the study, which also included 136 patients who had grade II-III odontogenic sinusitis associated with COVID-19 (72 male and 64 female) as well as other grade II-III cases with a mean of $7 \pm 3.4\%$. the disease duration among patients has been 10–15 years. The anthropometric results without sign of the cardiorespiratory pathology were found in 30s of

XX century. Basic therapy was performed following completion of all COVID-19 tests for patients with odontogenic sinusitis (according to the guideline Gold 2016). Doctoral dissertation for the degree of Doctor of Medicine "lesion characteristics and clinical-functional disorders in respiratory pathologies, acute tooth-related sinusitis" doctoral dissertation for the degree doctor of medicine by theme: "SOVID-19. This is how microbiocenosis functions in the course of GBP. In the fourth

Materials and Methods

The study was carried out in 2020–2021 in the Republican Clinical Hospital for Rehabilitation and Treatment of Tuberculosis Patients No. 7, Tashkent. The study type was observational-analytical and sought to analyze the clinical and functional features of odontogenic sinusitis in patients with previous history of COVID-19, especially when concurring chronic obstructive pulmonary disease (COPD).

In total, 136 cases of grade II–III odontogenic sinusitis combined with history of COVID-19 were entered into the study. Of these, 86 (63.2%) were male and 50 (36.8)% were female. The average age of the participants was 52.7 ± 3.4 years old. Average time course of obstructive lung pathology: 10 to 15 years.

Inclusion criteria were:

Confirmed history of COVID-19 infection.

Clinical and radiological diagnosis of odontogenic sinusitis stage II–III.

Note: COPD, different degrees of seriousness.

Exclusion criteria: no severe cardiovascular decompensation, no active phase of oncological diseases, and a negative consent to participate.

All patients were clinically examined in detail as mentioned below:

General clinical condition (complaints, history, and physical examination).

Otorhinolaryngological and dental examination.

Laboratory studies: CBC, CRP, coagulation profile (PT, fibrinogen D-dimer).

Assessment of endothelial dysfunction markers.

Functional testing of the lung (spirometry based on GOLD 2016 recommendations).

Radiography of the maxillary sinuses.

The simple treatment of odontogenic sinusitis could be given after negative COVID-19 status was confirmed. The treatment consisted in antibacterian therapy, anti-inflammatory medication, local approaches (sinus irrigation) and quite few times surgery. Patients with COPD were treated with standard bronchodilator therapy based on the GOLD guidelines.

Data were analyzed statistically by means of standard deviation statistics. Values represented means with standard deviation. $P < 0.05$ were considered to indicate a statistically significant difference.

Results

Clinical analysis showed a more severe and extended course of the disease than in those with odontogenic sinusitis following COVID-19 before the pandemic. The most frequent complaints were nasal obstruction (82%), purulent nasal discharge (76%), face pain in the projection of the maxillary sinuses (69%), headache (65%) and increased tiredness (88%).

Patients with associated COPD had significantly worse dyspnea and exercise intolerance. Forced expiratory volume in 1 s (FEV1) spirometric data was decreased significantly compared to pre-COVID-19 values ($p < 0.05$).

Laboratory findings revealed:

High C-reactive protein values related to an active inflammatory state.

Raised fibrinogen and D-dimer: indicative of activation of coagulation pathways.

Symptoms of endothelial injury reflected by microcirculatory dysfunction.

Clotting abnormalities were identified in 58% of subjects, reflecting ongoing post-COVID hypercoagulable state. Those with the most severe degree of respiratory failure manifested more extensive inflammatory and hemostatic derangements.

Radiologic findings included mucosal thickening of the maxillary sinuses (91%), fluid levels (64%), and evidence of chronic inflammatory remodeling (47%).

Mixed pathology (COVID-19+ COPD + odontogenic sinusitis) was also related with prolonged duration of recovery and more frequent exacerbations on follow-up.

Discussion

The results demonstrate that COVID-19 considerably impacts the clinical situation of odontogenic sinusitis, particularly in patients who have concomitant chronic obstructive pulmonary disease. Continued immune dysregulation following SARS-CoV-2 infection results in chronic inflammation and hampered mucosal healing.

Endothelial dysfunction and hypercoagulability, which are prominently reported in post-COVID syndrome might be playing a significant role in chronic sinus inflammation pathogenesis. Microcirculatory disruption could lead to oxygen deficiency of the tissue, and prevent the recovery following a trauma in the head and neck region.

The comorbidity of COPD exacerbates it because of chronic hypoxia, systemic inflammation and impaired capacity for adaptation. These results are in line with previous published data showing that patients post-COVID often present chronic metabolic and vascular alterations.

The relationship of the two respiratory and odontogenic pathology leads to mutual complicating effect that exacerbates complication and reduces effectiveness in treatment. As a result, comprehensive management of patients is required, including dentists, ENT specialists and pulmonologists.

volume of the collection "COVID-19: mech the results were annulled. Per Olausson. A permanent immune response to pathology in the human body is established after COVID-19, which causes a reduction of immunity and development of pathology," he says. Due to the compensatory reactions, there is a decrease in metabolic background and fatigue of adaptive processes, which leads to endothelial dysfunction. A study of 670 patients by the journal Science Translational Medicine showed that in people with obstructive sinusitis due to COVID-19, they developed an algorithm for diagnosing and pinpointing treatment options.

Conclusion

Post-COVID-19 odontogenic sinusitis is accompanied by a more severe course of the disease, continued inflammation and features of coagulopathy and endothelial dysfunction.

The involvement of chronic obstructive pulmonary disease is a determinant of poor clinical and functional outcome.

Post COVID immune and vascular alterations are major contributors in chronic odontogenic sinusitis pathogenesis, and should be taken into account when making diagnosis decisions and therapy.

Early identification, comprehensive assessment of respiratory and hemostatic factors, and treatment strategies tailored to the patient population has been associated with favourable clinical outcomes with minimal complications.

References

1. Amonov Sh.E., Karshiev Kh.K., Enazarov D.I., Normuminov F.P. Features of changes in peripheral blood parameters in patients with post-COVID purulent-inflammatory complications of the maxillofacial region. Collection of materials of the XI Volga Dental Forum "Actual Issues of Dentistry" C 494-498
2. Gnilitkaya V.B. Khristulenko A.L. Maltseva N.V. Stulikova E.L. Post-covid syndrome or "long" Covid. M. Gorky Department of Therapy FIPO them. prof. A.I. Dyadyka
3. Yu.A. Makedonova., S.V. Poroisky., L.M. Gavrikova, O.Yu. Afanasyeva Manifestation of diseases of the oral mucosa in patients who have had covid- Bulletin of VolgGMU 112 Issue 1 (77). 2021
4. Alyavi AL, Rakhimova DA, Sadykova GA Clinical and functional state in patients with chronic obstructive pulmonary disease at different degrees of pulmonary heart severity. III Congress of Thoracic Society of Kyrgyzstan. Bishkek, 2011: 83.
5. Alyavi A.L., Rakhimova D.A., Sadykova G.A. Clinical and experimental aspects of ozone therapy. Uzbekistan therapy ahborot-nomasi. Tashkent, 2015; 4: 74-78.
6. Baevsky R.M., Ivanov G.G. To the question of formalization of conclusions on the results of analysis of psychological approach to HRV. // Functional diagnostics. 2016. №2. 89-94
6. Chuchalin A.G. Chronic obstructive pulmonary disease and associated diseases. M.-2018.25p.
8. Global initiative for chronic obstructive lung disease. Global strategy for the diagnosis, management and prevention of chronic obstructive pulmonary disease. NHLBI / WHO workshop report. Bethesda: National Heart, Lung and Blood institute: update 2016 (W.Wgoldcopd. com).
9. Calverley P.M., Walker P. Chronic obstructive pulmonary disease. //Lancet.-2016.-vol.362.-p.1053-1061.
10. Peiffer,C.J., B. Poline, L. Thivard, M. Aubier, Y. Samson. Neural substrates for the perception of

- acutely induced dyspnea. *Am J Respir Crit Care Med.* 2016.163(4):951–72
11. Rakhimova D.A., Kasimova, G.M. Estimating psychovegetative factors of regulation in patients with chronic obstructive pulmonale diseases. «*Journal of life-sciences*». Argentina, 2012; 4: 457-461.
7. 12. Broekhuizen R, Wouters EF, Creutzberg EC, Schols AM. Raised CRP levels to mark metabolic and functional impairment in advanced COPD // *Thorax.* -2006. -Vol.61. - P.17-22.
8. 13. Burgel PR, Paillasseur JL, Peene B, et al. Two distinct chronic obstructive pulmonary diseases (COPD) phenotypes are associated with a high risk of mortality *PLoS One.* -2012. -Vol.7. -P.e51048.
9. 14. Fattaeva D. R., Rizaev J. A., Rakhimova D. A. Efficiency of Different Modes of Therapy for Higher Sinus after COVID-19 in Chronic Obstructive Pulmonary Disease // *Annals of the Romanian Society for Cell Biology.* – 2021. – С. 6378–6383-6378–6383.
10. 15. Фаттаева Д. Р. и др. CLINICAL PICTURE OF SINUSITIS IN PATIENTS AFTER COVID-19 WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE // *УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ.* – 2021. – Т. 2. – №.2
11. Холиков А. и др. ПЕРЕЛОМ ЧЕЛЮСТИ ДИАГНОСТИКА И ЛЕЧЕНИЕ // *Stomatologiya.* – 2020. – №. 2 (79). – С. 88-93.
12. Холиков А. и др. JAW FRACTURE DIAGNOSTICS AND TREATMENT // *Stomatologiya.* – 2020. – Т. 1. – №. 2 (79). – С. 88-93.
13. 18. Холиков А. и др. Сравнительная характеристика методов лечения переломов нижней челюсти // *Журнал вестник врача.* – 2020. – Т. 1. – №. 4. – С. 109-114.
14. Холиков А. и др. Анализ современной эпидемиологической картины переломов нижней челюсти // *Журнал вестник врача.* – 2020. – Т. 1. – №. 4. – С. 103-108.
15. Fattayeva D. R. ADVANTAGES OF EARLY DETECTION AND TREATMENT OF ODONTOGENIC HEMORRHOIDS IN PREVENTING COVID-19 COMPLICATIONS // *British Medical Journal.* – 2021. – Т. 1. – №. 1.2.
16. Фаттаева Д., Ризаев Ж., Рахимова Д. ОСОБЕННОСТИ КЛИНИЧЕСКОГО ТЕЧЕНИЯ ХРОНИЧЕСКОГО ГАЙМОРИТА ПРИ БРОНХО-ЛЕГОЧНОЙ ПАТОЛОГИИ // *SCIENTIFIC IDEAS OF YOUNG SCIENTISTS.* – 2021. – С. 28.
17. Рахимова Д. А., Садыкова Г. А., Фаттаева Д. Р. ВЛИЯНИЕ РЕЗОНАНСНОЙ ТЕРАПИИ НА СОСТОЯНИЕ КАРДИОРЕСПИРАТОРНОЙ СИСТЕМЫ БОЛЬНЫХ ХРОНИЧЕСКОЙ ОБСТРУКТИВНОЙ БОЛЕЗНЬЮ ЛЕГКИХ ПЕРЕНЕСШИХ COVID-19 // *Теоретические и прикладные проблемы современной науки и образования.* – 2021. – С. 376-380.