Oral Care on Oncopediatric Patients during COVID-19 Pandemic: What's Changing?

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Cuidados Bucais em Pacientes Oncopediátricos durante a Pandemia de Covid-19: o Que Está Mudando? Cuidado Bucal en Pacientes Oncopediatricos durante la Pandemia de Covid-19: ¿Qué Está Cambiando?

Isis de Araújo Ferreira Muniz¹; Fabio Gomes dos Santos²; Ana Maria Gondim Valença³; Simone Alves de Sousa⁴; Eliane Batista Medeiros-Serpa⁵; Paulo Rogério Ferreti Bonan⁶

Dear Editor,

During the last weeks, we are facing a global pandemic which affects the general population and health care system. Observing COVID-19 care, hospitals and health care services are focusing their attention on COVID-19 combat. Considering this emergency, structural and logistic impacts over health services are perceived evidently and conventional routines of multiprofessional teams are being dramatically changed. For instance, oncopediatric services are formed by different professionals as physicians, nurses, physiotherapists, nutritionists, audiologists, psychologists and dentists¹.

They assist patients with immunosuppression daily where pathogenic cross-transmission should be carefully avoided. There is still no sufficient information on the course of the disease in oncopediatric patients, however it is known that the cancer patient is 3.56 times more likely to develop severe events when compared to patients without cancer^{2,3}. Infections in children by SARS-COV2 are currently reported⁴. In the other hand, overall care is mandatory to reduce comorbidities and enhance the quality of life. Many oncopediatric services, due to concerns over SARS-COV2 transmission, restricted activities on side-effects control and systemic management to the minimal possible including oral care activities⁵.

The importance of dental team on oncopediatric services is well documented. Prevention and management of oral mucositis, control of infectious foci associated with dental infections, identification of microbial induced lesions on oral cavity and dental biofilm removal are some of their attributions. Without care and instruction, patients could develop from secondary infections up to fatal sepsis. With comprehensible restrictions over their activities, dental team should plan strategies to surveillance and dental care with minimal time of exposure and personal contact with the patients. Considering these points, dental team must ameliorate specific communication with nurses and physicians seeking for oral complaints reported by patients. It is true considering oral mucositis^{6,7}. With a reduced team, professionals with direct contact with patients could be pro-active and ask each patient or responsible about chewing, speaking or swallowing complaints or impairments. In these cases, oral photos using mobile devices could be taken and transmitted to the dental team which will plan an intervention by laser therapy or drug therapy.

For example, we assisted a case shown in Figure 1 below last week. A 6-year-old girl with acute lymphoblastic leukemia (ALL) presented oral mucositis grade 3 (WHO scale for Oral Mucositis). Only one member of the dental team was at the ambulatory and he used a mobile device to share information about the patient's systemic and oral conditions. Based in this report, the option was to hospitalize the patient and start the treatment protocol for severe oral mucositis lesions used frequently by the hospital's pediatrics sector (laser therapy and drug therapy)⁸.

Some strategies could be developed in compliance with normative dental conditions. Many patients have different dental needs, sometimes involving infectious conditions, which need to be resolved by reducing the patient's exposure to the risks of contagion. Measures to reduce aerosol formation should be prioritized. Minimally invasive techniques should be indicated⁹, such as ART (Atraumatic Restoration Technique), chemomechanical and selective caries removal¹⁰. Any procedure must be performed with the use of protective barriers (gloves, N95 respirators, goggles, face shield, surgical hoods and gowns) for surgeons and assistants¹¹, and goggles, hoods

³PhD, Health Science Center, Department of Clinical and Social Dentistry, Federal University of Paraiba. João Pessoa (PB), Brazil. Orcid iD: https://orcid.org/0000-0001-8460-3981 ⁴PhD, Health Science Center, Department of Clinical and Social Dentistry, Federal University of Paraiba. João Pessoa (PB), Brazil. Orcid iD: https://orcid.org/0000-0002-3254-9036 ⁵PhD, Health Science Center, Department of Clinical and Social Dentistry, Federal University of Paraiba. João Pessoa (PB), Brazil. Orcid iD: https://orcid.org/0000-0002-9119-4079 ⁶PhD, Health Science Center, Department of Clinical and Social Dentistry, Federal University of Paraiba. João Pessoa (PB), Brazil. Orcid iD: https://orcid.org/0000-0002-4449-4343 **Corresponding author:** Isis de Araújo Ferreira Muniz. Rua Agente Fiscal Paulo Aquino Mendonça, 89 – Mangabeira. João Pessoa (PB), Brazil. CEP 58055-600. ⁶E-mail: Isismuniz13@hotmail.com



¹MSc, Post Graduate Program in Dentistry, Federal University of Paraíba. João Pessoa (PB), Brazil. Orcid iD: https://orcid.org/0000-0002-5550-0294

²MSc, Post Graduate Program in Dentistry, Federal University of Paraíba. João Pessoa (PB), Brazil. Orcid iD: https://orcid.org/0000-0002-6612-1134



 $\ensuremath{\mbox{Figure 1}}$. Image of WhatsApp screen illustrating communication among the dental team

and aprons for patients. Dental rotational systems, triple syringe and aspiration system should also be carefully protected. All surfaces of the dental chair should be cleaned, disinfected and wrapped in plastic film for each patient.

In this way, personal communication and social media apps can be used to inform and stimulate oral self-care and monitor the patient's oral health condition remotely, ensuring the protection of the patient and the team⁵. In summary, we are facing changes and new challenges on oncopediatric supportive conduct. Surveillance, planning, limited personal contact and good communication are mandatory during these days and for the upcoming future. We are looking forward for new recommendations from our councils and committees.

DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interests to declare.

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REFERENCES

- 1. American Academy of Pediatric Dentistry. Dental management of pediatric patients receiving immunosuppressive therapy and/or radiation therapy [Internet]. Reference Manual Dentistry; 2018 [cited 2020 Apr 11]. Available from: https://www.aapd.org/ media/Policies_Guidelines/BP_Chemo.pdf
- 2. World Health Organization. Coordinated global research roadmap: 2019 novel coronavirus [Internet]. Geneva: WHO; 2020 Mar [cited 2020 Apr 10]. Available from: https://www.who.int/blueprint/priority-diseases/keyaction/Coronavirus_Roadmap_V9.pdf?ua=1
- Liang W, Guan W, Chen R, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. Lancet Oncol. 2020;21(3):335-7. doi: https://doi. org/10.1016/S1470-2045(20)30096-6
- Coronavirus disease 2019 in children United States, February 12-April 2, 2020. MMWR Morb Mortal Wkly Rep. 2020;69:422-6. doi: http://doi.org/10.15585/ mmwr.mm6914e4
- Machado RA, Souza NL, Oliveira RM, et al. Social media and telemedicine for oral diagnosis and counselling in the COVID-19 era. Oral Oncol. 2020;105:104685. doi: https://doi.org/10.1016/j.oraloncology.2020.104685
- 6. Ribeiro ILA, Melo ACR, Limão NP, et al. Oral mucositis in pediatric oncology patients: a nested case-control to a prospective cohort. Braz Dent J. 2020;31(1):78-88. doi: https://doi.org/10.1590/0103-6440201802881
- Damascena LCL, de Lucena NNN, Ribeiro ILA, et al. Severe oral mucositis in pediatric cancer patients: survival analysis and predictive factors. Int J Environ Res Public Health. 2020;17(4):1235. doi: https://doi.org/10.3390/ ijerph17041235
- 8. Ribeiro ILA, Valença AMG, Bonan PRF. Treatment of severe oral mucositis in a pediatric patient

undergoing chemotherapy. RGO, Rev Gaúch Odontol. 2015;63(4):467-71. doi: https://doi.org/10.1590/1981-863720150003000143007

- Mallineni SK, Innes NP, Raggio DP, et al. Coronavirus disease (COVID-19): characteristics in children and considerations for dentists providing their care. Int J Paediatr Dent. 2020;30(3):245-50. doi: https://doi. org/10.1111/ipd.12653
- Schwendicke F, Splieth C, Breschi L, et al. When to intervene in the caries process? An expert Delphi consensus statement. Clin Oral Invest. 2019;23(10):3691-3703. doi: https://doi.org/10.1007/s00784-019-03058-w
- 11. Bann DV, Patel VA, Saadi R, et al. Impact of coronavirus (COVID-19) on otolaryngologic surgery: brief commentary. Head Neck. 2020;42(6):1227-34. doi: https://doi.org/10.1002/hed.26162

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