

What is the role of the dentistry in organ transplants?

Paulo Sérgio da Silva Santos,^{1,2} & Walmyr Ribeiro de Mello.^{2,3}

Affiliations: ¹Department of Surgery, Stomatology, Pathology and Radiology of Bauru School of Dentistry of University of São Paulo, Brazil. ²Committee of Dentistry of Brazilian Association of Organ Transplantation (ABTO). ³Hospital Dentistry Team of Hospital Samaritano de São Paulo

Corresponding author: Paulo Sérgio da Silva Santos. Brisolla, 9-75, Vila Universitária, Bauru, SP, Brazil. Phone: (55-14) 32166113. E-mail: paulosss@fob.usp.br

Infections of oral origin are a potential threat for transplant candidates because oral diseases tend to be more severe and untreated in people who have received transplants. Although not yet scientifically proven, evaluation and dental treatment during the pre-transplantation period is recommended in order to prevent infections and resulting odontogenic-origin sepsis during the post-transplant period, when patients receive immunosuppressive therapy.¹

Careful oral examination and evaluation of the patient, including laboratory tests, is recommended in order to ensure correct oral preparation and control of oral disease prior to organ transplantation (OT). Patients with chronic diseases that lead to OT may present at any dental office for treatment and therefore general dentists should be aware of the unique concerns involving their assessment, education, treatment and maintenance of oral health.²

The equilibrium between viral persistence and immune regulation of the host is modified in many immunological conditions related to OT. Among the opportunistic oral infections that can cause some impairment in these patients, the most common are fungal infections, and viral infections by CMV and HSV, and must be diagnosed early by a dentist.³ The use of systemic medications can affect the periodontal tissues, modifying their inflammatory and immune response, especially the gingiva. Some immunosuppressive drugs used in OT may trigger gingival hyperplasia.⁴

Because of the conditions above described it is considered that the communication between the organ transplant team and dentist is important in formulating individualized care plans and transplant patients need comprehensive and regular dental care during the pre and post-transplant period and a doctor of oral medicine should be part of a multidisciplinary team of medical specialists.⁵ Appropriate dental care increases the survival of the transplanted organ.

Conflict of interests: None.

Acknowledgements: To members of the Committee of Dentistry of Brazilian Society of Organ Transplantation (ABTO), Fábio Luiz Coracin, Liliane Lins Kusterer, Renato Costa Franco Baldan, Fabiana Noal Granzotto, Dimitry Sarmiento, Jéssica Alves, Paulo Célio Kelles Jr and Karla Bachega.

Cite as: Santos PS & Mello WR. What is the role of dentistry in organ transplants? *J Oral Res* 2018; 7(1):14.
doi:10.17126/joralres.2018.002

REFERENCES.

1. Santos PS, Soler MP, Felix VB. Surgical dental treatment prior to liver transplantation. *Braz J Oral Sc.* 2011;10(4):254–7.
2. Silva Santos PS, Fernandes KS, Gallottini MH. Assessment and management of oral health in liver transplant candidates. *J Appl Oral Sci.* 2012;20(2):241–5.
3. Santos PS, Tinoco-Araújo JE, Bloise AP, Lauris JR. Viral opportunistic infections in organ and tissue transplanted patients: comparison between clinical examination and PCR. *Int J Clin Dent.* 2014;7(1):95–100.
4. Newman GM, Takei HH, Klokkevold PR, Carranza FA. *Carranza's Clinical Periodontology*. 12th Ed. Philadelphia: Saunders; 2014.
5. Gašpar M, Glavina A, Grubišić K, Sabol I, Bušić M, Mravak M. Stipetić The Oral Cavity State in Renal Transplant Recipients. *Acta Stomatol Croat.* 2015;49(3):204–13.