

Letters to Editor

Nanotechnology, Dentistry and Clefts of the Lip and Palate

The editor,

Sir,

I read with great interest the article entitled "Nanotechnology in Dentistry Today" (1), because it is a subject in enough evidence today. Timely should be emphasized another topic related with well-known highlighting in dentistry, the applicability of the advances on the tissue engineering combined with the nanotechnology in the rehabilitation of the clefts of the lip and palate.

In turn, in order of repair the bone defect caused by complete clefts of the lip and palate that affect the alveolar ridge, the alveolar graft technique with the use of recombinant human bone morphogenetic protein Type-2 (rhBMP-2), has been widely used in Hospital de Reabilitação de Anomalias Craniofaciais da Universidade de São Paulo (HRAC / USP), especially with full potential to induce bone formation in this region (2). Moreover, it presents success rates similar to the conventional technique, which uses most commonly as filling material autologous bone marrow-particulate fragments obtained from the iliac crest (2, 3).

In addition, it is worth noting that within of the HRAC / USP the alveolar graft technique with rhBMP-2 is performed in secondary time between nine and 12 years old, so that with additional advantages, stands out against conventional technique. Assumption of this, its main features include less surgical morbidity, absence of physical limiting the amount of bone from the donor area, reducing the number of professionals in the surgical team and of the length of

stay (2), becoming so in a likely alternative to simplification of this phase of the treatment (2, 3) together good acceptance and satisfaction for patients and their families.

However, given the possibilities of triggering of more intense inflammatory reaction and, therefore, a post-operative oedema more exacerbated (4), further investigations should be carried out to verify the magnitude of the influence of this clinical finding on the whole component systemic these individuals and not just on the surgical results.

Keywords: Cleft lip, cleft palate, nanotechnology

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