

Stemness ability of human dental pulp stem cells related to the *in vivo* and *in vitro* aging

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“Mirror, mirror on the wall, who’s the fairest of them all?” This is certainly the most cited expression of the 21 century. We do not want to get old, and in this context a lot of hopeful are set on stem cell therapy for tissue regeneration: regeneration of skin, dermis, cartilage, bone, nervous sistem and so on. Most of all on our smile that it is our business card. Rapid and good regeneration of alveolar bone to support new dental implant is up to now ensured by the use adult mesenchymal stem cells. But are they able to conserve their stemness ability for all the age of the donors? In light of such consideration aim of the present work has been the study of the biological properties such as proliferation and stemness ability of human adult dental pulp stem cells (DPSC) in relation to the age of the donors and to the *in vitro* aging. Human dental pulps derived from adult subjects aged 16–over 66 years have been isolated and cultured in presence of differentiative medium. Results obtained confirmed a correlation between age and conservation of stemness during *in vitro* aging.

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