

EFFECTS OF THE HUMAN AMNIOTIC MEMBRANE ON DENTAL SOCKET HEALING IN RATS

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A study was carried out on the effects of the human amniotic membrane (HAM) during wound healing fresh extraction dental sockets on rat maxillary incisors after HAM implantation. **Material and Methods.** A new method of HAM storage was developed and was denominated as Modified Criovac Technique, which can be divided into 3 phases: cell disintegration, dehydration, and sterilization by gamma irradiation. This method increased the membrane life time, is safe and its sterilization was effective, facilitating the future use of the material. Experiments were performed in 30 male rats, with an average weight of 320 grams each. The animals were divided into 2 groups: experimental and control. The observation times were 2, 7, 14, and 30 days. Three animals of each group were sacrificed, and the specimens were processed for histological routine. **Results.** Studies under light microscopy revealed that HAM was biologically compatible with bone tissue, did not show signs of rejection. In addition, we observed resorption of HAM during healing time that has been increased at the dental socket because of HAM presence.

Key Words: Human amniotic membrane; wound healing; dental sockets, rat.