

Impact of Local Anesthesia on Wound Healing

Abstarct:

Different local anesthetics produce multiple effects on wound healing, although this effect did not demonstrated clearly in experimental study. This study aimed to evaluate the effects of several local anesthetics (lidocaine, articaïne, mepivacaine) on healing of oral mucosal wound healing in experimental rabbits by histological examination. The study was conducted on eight healthy adult male New Zealand white rabbits which divided into four group (n=2) control group which received no treatment group two (received lidocaine 2% with adrenalin) group three (received mepivacaine) and group four (received articaïne 4%). oral mucosal wound were initiated experimentally in all group and each group received their treatment by local application one time daily for six day (except control group) in the third day half of the animal were sacrificed in each group and histological examination for the wound area were conducted, the remaining animal were sacrificed in the sixth day of treatment and histological examination were made for the wound area to compare the result between the four group. The mepivacaine group produce better result (enhance healing of the oral mucosal wound) followed by articaïne and lidocaine group compared with control one. This study showed that different type of local anesthesia produces different effects on wound healing manifested histologically and clinically.