Fibrin glue reduces the dissolution rate of sodium hyaluronate.

Authors: Wadstrom J., Tengblad A.

Publication Date: 1993

Abstract:

Sodium hyaluronate (HA) is known to modulate wound healing and interact with inflammatory reactions. High concentrations of extracellular HA are for example correlated to scarless wound healing. Topical treatment with HA has, however, limited effect due to the rapid clearance of HA in the tissue. In an effort to prolong the dissolution rate and enhance the effect of topically administered HA, HA was incorporated in a cross linked fibrin clot and placed in NaCl. The concentration of HA in the NaCl solution was analysed after 30', 60', 4h, 8h, and 24h. It was found that the dissolution rate of HA incorporated in cross linked fibrin was dramatically decreased in vitro, especially when the HA-fibrin mixture was put at rest and not exposed to a mechanical stress. The findings indicate a new possibility for slow release of HA after topical administration.