

Comparative study between fibrin glue and platelet rich plasma in dogs skin grafts.

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Abstract:

PURPOSE: Compare fibrin glue (Tissucol()) and platelet-rich plasma in full-thickness mesh skin grafts in dogs.

METHODS: Eighteen dogs were used, divided into two groups: fibrin glue (FG) and platelet-rich plasma (PRP). In all the animals, a full-thickness 3x3 cm mesh skin graft was implanted. In the left limb, the biomaterial was place between the graft and the receptor bed, according to the group, while the right limb served as the control group. All the animals were evaluated clinically every 48 hours until the 14th day, using the variables of exudation, coloration, edema and cosmetic appearance. Three animals were evaluated histologically, on the third, seventh and tenth postoperative days, using the variables of fibroblasts, collagen, granulation tissue, microscopic integration-adherence and acute inflammation.

RESULTS: Clinical evaluations showed that the group CF showed better scores for all variables compared to PRP group. On the histological evaluations PRP group had a higher presence of fibroblasts in the seventh and fourteenth days.

CONCLUSION: The fibrin glue group was clinically superior to the platelet-rich group when used on full-thickness skin grafts in dogs.