Application of concentrated growth factors in reconstruction of bone

defects after removal of large jaw cysts--the two cases report.

Authors: Mirkovic S, Djurdjevic-Mirkovic T, Pugkar T

Publication Date: 2015

Abstract:

INTRODUCTION: Coagulation and blood clot formation in bone defects is sometimes followed by

retraction of a blood clot and serum extrusion, thus producing peripheral serum-filled spaces

between bony wall and coagulum. This can result in a higher incidence of postoperative

complications. Stabilization of blood coagulum, which enables successful primary healing, may be

accomplished by autotransplantation, allotransplantation, xenotransplantation, or application of

autologous platelet concentrate and concentrated growth factors (CGF). Case report. Two patients

with large cystic lesions in the upper and lower jaw were presented. In both patients postoperative

bony defects were filled with autologous fibrin rich blocks containing CGF. Postoperative course

passed uneventfully.

CONCLUSION: Application of fibrin rich blocks containing CGF is one of the possible methods for

reconstruction of bone defects. CGF can be applied alone or mixed with a bone graft. The method is

relatively simple, without risk of transmissible and allergic diseases and economically feasible.