Use of autologous fibrin glue (platelet-poor plasma) in abdominal dermolipectomies.

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Abstract:

Autologous plasma is endowed with properties that speed up healing, hemostasis, and

adhesiveness, in addition to growth factors. Through an established protocol, it was possible to

isolate thrombin, as well as the platelet-rich plasma (PRP) and platelet-poor plasma (PPP) fractions.

The purpose of this study was to analyze autologous use of thrombin and PPP to foster adhesion

between an abdominal dermoadipose flap and the aponeurotic surface in abdominal

dermolipectomies. The data from 40 patients who underwent abdominal dermolipectomies were

analyzed, with 20 patients using thrombin and autologous PPP (Plasma group) and 20 patients with

no intervention (Control group). An attempt was made to assess adhesive power by quantifying the

serohematic liquid volume gauged during the postoperative days (POD), and also noting the

incidence of seroma. Other variables such as age and body mass index (BMI) were also analyzed.

The reduction in the aspiration drain debit was statistically relevant only on the first POD in the

Plasma group. There was no reduction in the incidence of seroma in these patients. Similarly, age

and BMI did not influence these outcomes. The PPP fostered adhesion between the abdominal

dermoadipose flap and the aponeurotic surface only on the first POD and had no influence

whatsoever on the incidence of seroma. There are few reports on the use of PPP for plastic surgery,

particularly the autologous type, opening up possibilities for further research projects to expand its

use. LEVEL OF EVIDENCE III: This journal requires that authors assign a level of evidence to each

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