

Summary & Conclusion

Summary

Seroma formation is a common postoperative complication in the field of plastic and reconstructive surgery. Usually, it is a self-limited phenomenon, but occasionally it may cause significant problems.

Many trials we done to reduce the incidence of seroma following abdominoplasty, one of these methods was the use of fibrin sealant.

Fibrin glue (FG) is used to control bleeding, to adhere tissues together, and to seal tissue defects.

The FG preparation is reviewed in order to compare the advantages and disadvantages of the different products reported and to summarize the clinical applications. It is concluded that additional studies are needed to fully evaluate the advantages and disadvantages of fibrinogen concentrated using cryoprecipitation and chemical precipitation and that specific advantages exist for fibrin sealant use.

In this study we compared the incidence of seroma in abdominoplasty with and without using the fibrin sealant.

Also the different periods needed for the drains removal were analyzed. also the amount of postoperative fluid collection before its removal. Evaluation of complications regarding the use of fibrin glue.

Fourty patient were divided randomly into 2 groups each of them were subdivided into 3 subgroups.

Group1: abdominoplasty will be done without using the fibrin sealant.

Group 2: traditional abdominoplasty will be done using the fibrin sealant.

Summary & Conclusion

The groups were compared regarding The collected data including :the number of patient in each group,use of fibrin sealant, age , height ,weight , Body Mass Index (BMI) , weight of resected apron, amount secreted in the drains (drainage total)and drainage in every day and, the time needed for drains removal , tobacco use.

The data of different groups were compared together and the final results were compared to other international studies.

Conclusion

Reviewing these results there was no significant difference between the 2 groups regarding the number of patients ,sex, BMI, age, weight of resected apron ,weight and hight of patients in both groups,or percentage of smokers.

Group 1 A includes:6 patients.
Group 2 A includes:6 patients.
Group 1 B includes:8 patients.
Group 2 B includes : 8 patients .
Group 1 C includes:6 patients.
Group 2 C includes: 6 patients.

Results showed marked difference in the period needed for drain removal that there was reduction for the period needed to remove the drain by 40 %.As a result of early drain removal there was a less hospital stay and early return to the normal activites.Also this led to less financial burden on the patient.

Regarding the extra cost on the patient with the use of fibrin glue, the cost of the thrombin vial is around 20\$.

Also there was marked difference in the amount collected in the drains showing that the amount was less in group 2 by 50%.

The percent of seroma was markedly reduced from 20% in group 1 to 0% in group 2.But there was incidence of hematoma formation in group 2 in one case , most probably due to increasing the coagulation leading to clotting of blood and obstruction of drains and hematoma formation.

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Compared to other international study ,the results was almost the same with *Norma Cruz et al 2005*, with *Burt M. et al in 2006* and with *N. Toman et al 2007* .

In 2012 Marcos Eduardo et al The results of this study does not match with our results regarding the effect of fibrin sealant in reduction of incidence of post abdominoplasty seroma ,we think that the difference in the conclusion here came from the fact that they did not use suction drain in addition to the fibrin sealant, indicating the crucial role of the drain with the fibrin sealant to decrease the incidence of post abdominoplasty seroma and to decrease the amount of fluid collection .That is why we recommend suction drain use wth the fibrin glue following abdominoplasty.

We recommend fibrin sealant as an adjunct in abdominoplasty and discuss future studies and applications in plastic surgery.