Suction drains, quilting sutures, and fibrin sealant in the prevention of seroma formation in abdominoplasty: which is the best strategy?.

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Abstract:

Seroma is the most common complication in abdominoplasty and abdominal ultrasound is one of the best noninvasive methods for diagnosing seroma formation. The aim of this study was to compare the use of suction drains, quilting sutures, and fibrin sealant in abdominoplasty to determine the best strategy to prevent seroma formation. Forty-three female patients, aged 20-66 years, nonsmokers, with Nahas' type III deformities, and body mass index (BMI) ranging from 18.0 to 24.9 kg/m(2), underwent abdominoplasty between March and October 2008 in a public hospital setting. The patients were randomly allocated to one of three treatment groups: DN group (n = 15), abdominoplasty with suction drains alone; QS group (n = 13), abdominoplasty with quilting suture between the subcutaneous tissue of the flap and musculoaponeurotic layer of the anterior abdominal wall; and FS group (n = 15), abdominoplasty with fibrin sealant. All patients underwent ultrasound examination on postoperative days 15 and 30 for detection of abdominal fluid collections. The groups were homogeneous for age and BMI. There was a significant reduction in seroma formation between postoperative days 15 and 30 in the three groups (DN group, P = 0.0003; QS group, P = 0.0011; and FS group, P = 0.0003). Seroma formation was significantly higher in the FS group (H = 6.04, P < 0.05) compared with the DN and QS groups on postoperative day 15. Seroma formation was significantly lower in the DN and QS groups compared with the FS group on postoperative day 15.