



## **ORAL PRESENTATION GROUP 2 – PRESENTATION 2**

### **Venous Thromboembolism (VTE) Chemoprophylaxis in Abdominal Body Contouring: Evaluation of Safety, Efficacy and Risks**

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#### Introduction

Few studies in the literature examine the outcomes of outpatient postoperative VTE chemoprophylaxis in body contouring surgery. The aim of this study is to evaluate the safety of prescribing outpatient VTE chemoprophylaxis after abdominal contouring surgery.

#### Methods

A single-center retrospective chart review of all abdominal body contouring procedures performed by the senior author from 2007 to 2018 was conducted. Four procedures were included: traditional panniculectomy, abdominoplasty, fleur-de-lis panniculectomy, and body contouring liposuction. Patients in Group I received a single dose of 5000 Units of subcutaneous Heparin in the immediate preoperative period. Group II patients received 40 mg of subcutaneous Enoxaparin, both in the immediate preoperative period and for seven days postoperatively (extended-duration regimen). Data collection included demographics, pre-operative risk factors and Caprini scores. Complications included bleeding/hematoma, infection, skin dehiscence/necrosis, and VTE.

#### Results

A total of 194 patients were included in the study, 66 in Group I and 128 in Group II. In terms of demographics and risk factors, the only statistically significant difference was in the smoking status, where more patients in Group II were former smokers, 37.5% versus 18.2%, and less without a smoking history, 56.3% vs. 75.8% ( $p=0.019$ ). The two most common procedures in Group I were traditional panniculectomy (42.4%) and liposuction (28.8%), whereas in Group II it was abdominoplasty (31.3%) and fleur-de-lis panniculectomy (28.1%). The reoperation rates were significantly higher in patients who received heparin (22.7% vs. 10.9%,  $p=0.029$ ), with a

trend toward higher readmission rates compared to the extended-duration enoxaparin group (4.5% vs. 0.8%,  $p=0.082$ ). There were no differences with regards to the incidence of infection, seroma, bleeding/hematoma, wound complications or deep venous thrombosis/pulmonary embolism between the two cohorts. When comparing complication rates by surgical procedure, fleur-de-lis and traditional panniculectomies were associated with significantly higher wound complication rates compared to abdominoplasty and liposuction (41.0% and 27.4% vs. 17.5% and 13.5% respectively,  $p=0.041$ ).

### Conclusions

The use of extended-duration postoperative Enoxaparin for VTE chemoprophylaxis in abdominal contouring surgery is safe. Incorporation of this regimen in practice, especially in high-risk patients where post-discharge chemoprophylaxis is recommended, should be strongly considered.