Medial Thighplasty in the Massive Weight Loss Population: Risk Factors and Complications in 106 Patients

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Abstract

Introduction: Despite the increased popularity of medial thighplasty for management of inner thigh skin redundancy in the massive weight loss population, there is a lack of objective outcome data in the literature. Technical variations to this procedure include horizontal, short vertical, and long vertical incisions; each of which can be utilized with or without liposuction. We sought to describe thighplasty outcomes and safety at our institution.

Methods: A retrospective review of patients undergoing thighplasty was performed over a 10-year period. Age, gender, type of procedure, and BMI indices were recorded. Complications assessed included seroma, wound dehiscence, infection, hematoma, lymphedema, and VTE. Use of liposuction, co-morbidities, and re-operation were also assessed.

Results: One hundred six subjects (90 females and 16 males) underwent thighplasty with a mean age of 45.1±10.2 years, a mean maximum BMI of 52.4±9.1kg/m², a mean current BMI of 29.3kg/m²±4.3kg/m² and a mean delta BMI of 23.1±6.9kg/m². Seventy-two subjects (68%) underwent full-length vertical thighplasty, twenty-six (25%) underwent short scar incision thighplasty, and eight (6%) underwent horizontal incision thighplasty. Additionally, fifty-four (51%) underwent concomitant liposuction of the thigh. Seventy-two subjects (68%) had at least one complication. The wound dehiscence rate was 51%, the seroma rate was 25%, and the infection rate was 16%. Overall, 21 subjects (19.8%) developed edema. Of these, 12 subjects (11.3%) had edema resolve within 12 weeks and six subjects (5.6%) developed lymphedema lasting longer than 6 months. Six patients (5.8%) required re-operation for a complication. Horizontal only thighplasty was associated with a 17% complication rate, which was significantly less than vertical (77%) and short (66%) incision thighplasty (p=0.02). Age (p=0.02) and anemia (p=0.03) predicted an increased risk of overall complications. Female gender (p=0.02) and hypertension (p=0.03) correlated with seroma formation. Concomitant liposuction was associated with wound dehiscence (p=0.49, OR= 2.2). Age (p=0.01, OR= 1.08) and hypothyroid (p=0.01, OR= 4.5) correlated with an increased risk of infection.

Conclusion: Thighplasty is a challenging procedure with a high rate of complications in the massive weight loss population; most are minor and can be managed conservatively without operative intervention. Horizontal thighplasty avoids a T-point, and thus fewer wound healing issues are observed. Staging liposuction of the thighs around the zone of resection should be considered to reduce the risk of wound dehiscence.

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