Medical Malpractice Claims After Nonsurgical Cosmetic Procedures

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**BACKGROUND:** Nonsurgical procedures account for >40% of the 15 billion dollars spent on cosmetic procedures nationally each year. These procedures are being performed by physicians across a multitude of both surgical and nonsurgical specialties, and by physician extenders. Although nonsurgical procedures are often viewed as a low-risk alternative to cosmetic surgery, they are not without their own complications. Consequently, physicians assume the risk of malpractice litigation when performing or supervising such procedures. There is a paucity of literature regarding malpractice claims associated with nonsurgical cosmetic procedures. The goal of this study is to use multiple national legal databases to characterize such malpractice claims.

**METHODS:** Retrospective analyses of both the Westlaw legal database and VerdictSearch legal database were performed on all legal cases from 1985 to present that resulted in a verdict or settlement related to nonsurgical cosmetic procedures. The 10 most common nonsurgical cosmetic procedures were included in the search query. Malpractice cases were reviewed individually to ensure that they were directly related to nonsurgical cosmetic procedures and then the databases cross-referenced to eliminate any duplicates. The final combined database was then analyzed based on the procedure, primary malpractice claim, defendant qualifications and specialty, the case outcome, and the amount of award in case of plaintiff decision/settlement.

**RESULTS:** A total of 68 individual cases were collected and analyzed. The most common procedure was laser resurfacing (n = 20), followed by chemical peel (n = 17) and laser hair removal (n = 16). Despite being the most and second most common procedures performed over the last 2 decades, botulinum toxin injection and dermal filler injection only accounted for 1 and 8 malpractice claims, respectively. The most common cause for litigation for laser resurfacing (90%), chemical peel (94%), and laser hair removal (94%) was burns/scarring due to alleged inappropriate administration, whereas the most common cause for litigation after dermal filler injection was nodule/cyst formation (50%). Thirty-eight percent of all cases resulted in a decision in favor of the plaintiff (against the physician) and 6% of cases were settled out of court. The remaining resulted in favor of the defending physician. The average award after a decision in favor of the plaintiff was for $440,323.27 ± $419,404.77. The average settlement was for $393,625.00 ± $240,355.77. The majority of providers with identified specialties were board-certified plastic surgeons (n = 20), followed by dermatologists (n = 14) and ophthalmologist/oculoplastic surgeons (n = 6). There was a disproportionate number of general practitioners (internists, family practitioners, and pediatricians) (n = 7) given the small volume of cosmetic procedures they perform.
relative to other specialties. There was no significant difference between the procedure, the cause for litigation or the defendant specialty, and the outcome of the lawsuit or the final monetary award.

CONCLUSIONS: Medical malpractice litigation is a significant cost burden to physicians across all specialties, including those performing nonsurgical cosmetic procedures in the office. Given the rapidly increasing popularity of nonsurgical procedures, it is important that plastic surgeons are aware of the medicolegal landscape to avoid potential malpractice claims associated with such procedures.

Less Is More: Microvascular Thrombophylaxis With Factor-Xa Inhibitor Monotherapy

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PURPOSE: From surgery length and postoperative activity restrictions alone, free tissue transfer (FTT)-based breast reconstruction patients have an elevated risk of developing postoperative venous thromboembolism based on their Caprini score. However, because microanastomotic patency is critical, microsurgeons are keen on minimizing thrombophilic and vasoactive conditions. Additionally, compliance with traditional subcutaneous-based prophylaxis regimens is poor. Consequently, traditional dogma regarding appropriate FTT thrombophylaxis remains split and conclusive evidence is lacking. The purpose of this study was to examine the antithrombotic utility of factor Xa inhibitors after FTT.

METHODS: A single-surgeon, single-institution retrospective review was performed from January 2016 to January 2019 of patients undergoing FTT who received postoperative prophylactic anticoagulation with subcutaneous lovenox during their hospital stay and then postoperatively with an oral factor Xa inhibitor: rivaroxaban 10 mg daily for 10–14 days. Patients also received aspirin 81 mg for 30 days postoperatively. Preoperative hematology testing to identify thrombophilias was performed, and these patients received intravenous heparin 500 units/h for 5 days postoperatively, followed by Xarelto or home anticoagulation. The frequencies of postoperative deep venous thrombosis/venous thromboembolism (VTE) and outpatient hematoma were compared between patients with diagnosed thrombophilia and those without known risk factors.

RESULTS: One hundred sixty-three FTTs performed in 105 patients were included. The average follow-up was 11 months. No patient developed postoperative deep venous thrombosis, VTE, or outpatient hematoma. Postoperatively, 99.3% (162/163) of patients received rivaroxaban and 1.2% (2/163) remained on home (preoperative) apixaban regimens. Flap success (98.8%; 161/163) was achieved. Patients (3.7%; n = 6) were affected by thrombophilia: plasminogen-activator inhibitor-1 (n = 1), malignancy (n = 2), hyperhomocysteinemia (n = 1), factor II deficiency (n = 1), or severe lower extremity trauma (n = 1). Reoperation on postoperative day 1–2 was required in 3% (5/163) of flaps for hematoma evacuation (4) and microanastomotic venous congestion (1). Eighty percentage (4/5) of flaps were salvaged. One flap lap loss occurred in a patient with hyperhomocysteinemia.

CONCLUSIONS: Although recent efforts are growing, consensus microsurgical guidelines for prophylactic anticoagulation are lacking and studies are limited. One promising effort comes from the Enhanced Recovery after Surgery Society. The limited plastic surgery evidence suggests that it is useful to assess practices of other disciplines, including orthopedics. We achieved FTT outcomes free of postdischarge VTEs and hematomas by routinely prescribing oral factor Xa inhibitors. Novel to microsurgery, this regimen has been strongly validated in orthopedic surgery. Large multicenter orthopedic studies like the RECORD and XAMS studies and ORTHO-TEP registry have proven less mortality and bleeding risks with rivaroxaban compared to LMWH, enoxaparin, and fondaparinux. Our study indicates a potential similar efficacy for FTT patients, and further studies should be done to validate these findings.

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