

March 2023

Effects of Marijuana Use in Patients Undergoing Abdominal Free Flap Breast Reconstruction

Tala Al-Saghir
Wayne State University

Kinan Sawar
Wayne State University

Alexander Vraa
Henry Ford Health

Dunya Atisha
Henry Ford Health

Follow this and additional works at: https://digitalcommons.wayne.edu/som_srs

 Part of the [Plastic Surgery Commons](#), and the [Surgery Commons](#)

Recommended Citation

Al-Saghir, Tala; Sawar, Kinan; Vraa, Alexander; and Atisha, Dunya, "Effects of Marijuana Use in Patients Undergoing Abdominal Free Flap Breast Reconstruction" (2023). *Medical Student Research Symposium*. 251.

https://digitalcommons.wayne.edu/som_srs/251

This Research Abstract is brought to you for free and open access by the School of Medicine at DigitalCommons@WayneState. It has been accepted for inclusion in Medical Student Research Symposium by an authorized administrator of DigitalCommons@WayneState.

Title: Effects of Marijuana Use in Patients Undergoing Abdominal Free Flap Breast Reconstruction
Henry Ford Hospital, Detroit

Alexander Vraa, MBBS (1), Tala Al-Saghir, BS (2), Kinan Sawar, BS (2), Dunya Atisha, MD (3)
(1) Henry Ford Hospital, Detroit, MI, (2) Wayne State University School of Medicine, (3) Department of Plastic Surgery, Henry Ford Hospital, Detroit, MI

PURPOSE: Marijuana use is associated with incidence of vascular inflammation and clotting, resulting in endothelial damage and arteritis. As marijuana use rises, few studies have evaluated its impact on surgical outcomes, wound healing, and vascular anastomoses in free flap breast reconstruction.

METHODS: A retrospective cohort study of patients undergoing abdominal free flap breast reconstruction between 2016 and 2022 at a large metropolitan healthcare system was performed. Patient demographics, comorbidities, procedural details, and complications were analyzed. Minor complications were defined as skin necrosis, any wound requiring management in the clinic, hematoma, seroma, or fat necrosis that did not require intervention. Major complications were defined as re-operation, flap loss, thromboembolic events, or hospital readmission. Active marijuana users were those with marijuana use within 12 weeks of surgery. Those who utilized nicotine within 12 weeks of surgery were excluded from analysis.

RESULTS: 149 patients underwent 241 deep inferior epigastric artery-based flaps for breast reconstruction. There were 17 active marijuana users. There were no significant differences in patient age, race, BMI, cancer treatment, cancer stage, or operative details. However, there were significantly higher rates of anxiety/depression, tobacco and narcotic use, and hypertension in the marijuana use group ($P < 0.05$). There were no significant differences in incidence of major or minor complications between marijuana users and non-users.

CONCLUSION: Marijuana use appears to not impact surgical outcomes in breast free flap reconstruction. Advising marijuana abstinence pre-operatively may not alter patient outcomes. This study may be limited by power and further evaluation will be needed.