Abstract Text:

Abstract

Purpose:

Breast cancer patients in Asia and Asian American population Revealed considerable disparities from western population, such as younger age, lower prevalent rate of smoker, obesity and DM. Findings of prior studies regarding risk factors associated with complications in tissue expander breast reconstruction may not hold for Asian populations since most of them involve Western populations. In this study, we survey risk factors in an Asian population to provide additional evidence to the existing literature on the question of whether or not important differences exist between these two populations.

Materials and Methods:

Patients who underwent immediate, two-stage, tissue expander breast reconstruction from December 2008 to August 2014 in National Taiwan University Hospital were included in this study. Follow up observations of all patients were conducted until December 2014. Complications occurring only during the tissue expander stage were evaluated, including skin necrosis, capsular contracture, wound dehiscence, infection, implant rupture, and hematoma. Multivariate regression modeling was used to identify risk factors for complication.

Results:

A total of 246 consecutive, immediate, smooth round tissue expander placements were performed for breast reconstruction. The average period from tissue expander to permanent reconstruction was 211 days. The overall complication rate was 16.3 percent. The most common complication was skin necrosis (4.9%), followed by wound dehiscence (4.1%) and severe capsular contracture (3.6%). In the multivariate model, BMI ≥ 24 kg/m^2 was the only risk factor that reached statistical significance (OR 2.41, 95% CI 1.17-4.96).

Conclusion:

In this study, we have provided evidence that race disparities have an impact on the risk factors for complications associated with tissue expander breast reconstruction. BMI ≥ 24 kg/m^2 was the only risk factor significantly associated with complications. Clinically, BMI ≥ 24 kg/m^2, rather than the standard definition of obesity (BMI >30 kg/m^2), may be a more suitable cutoff point for risk in patients of Asia and Asian American.