ABSTRACT

Background

Reduction mammaplasty is the volumetric reduction in the breast bulk by removing excess fatty tissue, glandular tissue and skin. Preoperative determination of breast weight to be removed aids plastic surgeons in counseling the patient, application for insurance coverage and ensures optimal postoperative breast symmetry. After correlating breast anthropometrics to weights of breast tissue excised, various formulas have been developed to preoperatively predict resection weights. However, no attempt has been made to conclusively identify the most accurate formula. Determining the superior predictive formula that can be applied by plastic surgeons and plastic surgery residents not only increases ease of performing the procedure but also improves aesthetic outcomes.

Objectives

To determine the most accurate formula of preoperative prediction of breast resection weight in reduction mammaplasty

Methodology

It is an Analytical Cross sectional Observational study within one (1) year involving all consenting patients undergoing reduction mammaplasty at surgical departments of the Kenyatta National Hospital (KNH), the Aga Khan University Hospital (AKUHN), the Nairobi Hospital, the Mater Hospital and the Gertrudes Children’s Hospital. Twenty four (24) study participants shall be recruited consecutively upon consent and respective measurements done and recorded using a data collection tool. The data will be collected at a specific one point in time and relationship evaluated at that specific time. There will be no intervention from the researcher except in taking measurements for each respective formula. Predicted weights deviations from the actual weight of breast tissue excised shall be compared between the four formulas using repeated measures ANOVA at 95% confidence interval. Data shall be analyzed using SPSS version 21 and results presented in texts, charts and graphs

Conclusion

At the end of this study we shall determine the most accurate formula to be used for preoperative prediction of the resection weight in reduction mammaplasty.