

Variations in Breast Aesthetic Reconstruction Rates between Asian and Caucasian Patients Post Mastectomy in a UK Tertiary Breast Referral Centre: A Five-Year Institutional Review

Authors : Wisam Ismail, Chole Wright, Elizabeth Baker, Cathy Tait, Mohamed Salhab, Richard Linforth

Abstract : Background: Post-mastectomy breast reconstruction is an important treatment option for women with breast cancer with psychosocial, emotional and quality of life benefits. Despite this, Asian patients are one-fifth as likely as Caucasian patients to undergo reconstruction after mastectomy. Aim: This study aimed to assess the difference in breast reconstruction rates between Asian and Caucasian patients treated at Bradford Teaching Hospitals between May 2011 - December 2015. The long-term goal is to equip healthcare professionals to improve breast cancer treatment outcome by increasing breast reconstruction rates in this sub-population. Methods: All patients undergoing mastectomy were identified using a prospectively collected departmental database. Further data was obtained via retrospective electronic case note review. Bradford city population is about 530,000 by the end of 2015, with 67.44% of the city's population was White ethnic groups and 26.83% Asian Ethnic Groups (UK population consensus). The majority of Asian population speaks Urdu, hence an Urdu speaking breast care nurse was appointed to facilitate communications and deliver a better understanding of the reconstruction options and pathways. Statistical analysis was undertaken using the SAS program. Patients were stratified by age, self-reported ethnicity, axillary surgery and reconstruction. Relative odds were calculated using univariate and multivariate logistic regression analyses with adjustment for known confounders. An Urdu speaking breast care nurse was employed throughout this period to facilitate communication and patient decision making. Results: 506 patients underwent Mastectomy over 5 years. 72 (14%) Asian v. 434 (85%) Caucasian. Overall median age is 64 years (SD1.1). Asian median age is 62 (SD0.9), versus Caucasian 65 (SD1.2). Total axillary clearance rate was 30% (42% Asian v.30% Caucasian). Overall reconstruction rate was 126 patients (28.9%). Only 6 of 72 Asian patients (<1%) underwent breast reconstruction versus 121 of 434 Caucasian (28%) ($p < 0.04$), Odds ratio 0.68, (95% confidence interval 0.57-0.79). Conclusions: There is a significant difference in post-mastectomy reconstruction rates between Asian and Caucasian patients. This difference is likely to be multi-factorial. Higher rates of axillary clearance in Asian patients might suggest later disease presentation and/or higher rates of subsequent adjuvant therapy, both of which, can impact on the suitability of breast reconstruction. Strategies aimed at reducing racial disparities in breast reconstruction should include symptom awareness to enable earlier presentation and facilitated communication to ensure informed decision-making.

Keywords : aesthetic, Asian, breast, reconstruction

Conference Title : ICSR2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020