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Nipple-areolar Complex Reconstruction following Postmastectomy Breast Reconstruction: A Comparative Utility Assessment Study

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Background: Nipple-areola complex (NAC) reconstruction occurs toward the final stage of breast reconstruction; however, not all women follow through with these procedures. The goal of this study was to determine the impact of the health state burden of living with a reconstructed breast before NAC reconstruction.

Methods: A sample of the population and medical students at McGill University were recruited to establish the utility scores [visual analog scale (VAS), time trade-off (TTO), and standard gamble (SG)] of living with an NAC deformity. Utility scores for monocular and binocular blindness were determined for validation and comparison. Linear regression and Student's *t* test were used for statistical analysis, and significance was set at $P < 0.05$.

Results: There were 103 prospective volunteers included. Utility scores (VAS, TTO, and SG) for NAC deformity were 0.84±0.18, 0.92±0.11, and 0.92±0.11, respectively. Age, gender, and ethnicity were not statistically significant independent predictors of utility scores. Income thresholds of <$10,000 and >$10,000 revealed a statistically significant difference for VAS ($P = 0.049$) and SG ($P = 0.015$). Linear regression analysis showed that medical education was directly proportional to the SG and TTO scores ($P < 0.05$).

Conclusions: The absence of NAC in a reconstructed breast can be objectively assessed using utility scores (VAS, 0.84±0.18; TTO, 0.92±0.11; SG, 0.92±0.11). In comparison to prior reported conditions, the quality of life in patients choosing to undergo NAC reconstruction is similar to that of persons living with a nasal deformity or an aging neck requiring rejuvenation. *(Plast Reconstr Surg Glob Open 2015;3:e380; doi: 10.1097/GOX.0000000000000133; Published online 20 April 2015.)*

The goal of breast reconstruction following mastectomy is ultimately the creation of a breast that is aesthetically pleasing and closely resembles its natural configuration. Breast reconstruction is generally performed in multiple stages and may include many revisions to address issues with shape and symmetry.[1–3] As such, there is no clear indication as to when the reconstructive process is complete.[1] It is considered by some to be when patients are satisfied with the appearance of their breast or when no more procedures are required.[1]

Nipple reconstruction is a fundamental part of the reconstructive process as patients associate this step with the endpoint of the reconstructive process.[2,4] Moreover, it provides improved aesthetic

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