1- Body image disturbance and surgical decision making in egyptian post menopausal breast cancer patients

Background: In most developing countries, as in Egypt; postmenopausal breast cancer cases are offered a radical form of surgery relying on their unawareness of the subsequent body image disturbance. This study aimed at evaluating the effect of breast cancer surgical choice; Breast Conservative Therapy (BCT) versus Modified Radical Mastectomy (MRM); on body image perception among Egyptian postmenopausal cases.

Methods: One hundred postmenopausal women with breast cancer were divided into 2 groups, one group underwent BCT and the other underwent MRM. Pre- and postoperative assessments of body image distress were done using four scales; Breast Impact of Treatment Scale (BITS), Impact of Event Scale (IES), Situational Discomfort Scale (SDS), and Body Satisfaction Scale (BSS).

Results: Preoperative assessment showed no statistical significant difference regarding cognitive, affective, behavioral and evaluative components of body image between both studied groups. While in postoperative assessment, women in MRM group showed higher levels of body image distress among cognitive, affective and behavioral aspects.

Conclusion: Body image is an important factor for postmenopausal women with breast cancer in developing countries where that concept is widely ignored. We should not deprive those cases from their right of less mutilating option of treatment as BCT.

2- Does telomere length mediate associations between inbreeding and increased risk for bipolar I disorder and schizophrenia?

We have recently found that consanguinity is a risk factor for bipolar I disorder (BP1) and schizophrenia (SZ) in Egypt. Inbreeding has been associated with increased cellular stress and impaired physiological function in plants and animals. Previous studies have reported that telomere length (TL), an index of oxidative stress and cellular senescence is significantly reduced among patients with SZ or mood disorders compared with control individuals. Hence we evaluated TL as a possible mediator of the observed association between consanguinity and BP1/SZ risk. Patients with BP1 (n=108), or SZ (n=60) were compared with screened adult controls in separate experiments. TL was estimated using a quantitative PCR (qPCR) based assay. The inbreeding coefficient/consanguinity rate was estimated in two ways: using 64 DNA polymorphisms (â€œDNA-basedâ€™ rate); and from family history data (â€œself reportâ€™). Significant correlation between TL and DNA based inbreeding was not observed overall, though suggestive trends were present among the SZ cases. No significant caseâ€“control differences in TL were found after controlling for demographic variables. Reduced TL may not explain a significant proportion of observed associations between consanguinity and risk for BP1/SZ.

3- Reduced Fertility and Fecundity among Patients with Bipolar I Disorder and Schizophrenia in Egypt.

Objective: To evaluate reproduction among patients with bipolar I disorder (BP1) or schizophrenia (SZ) in Egypt.

Methods: BP1 patients (n=113) were compared with community based, demographically
balanced controls (n=124) and SZ patients (n=79, DSM-IV). All participants were evaluated using structured interviews and corroborative data were obtained from relatives. Standard indices of procreation were included in multivariate analyses that incorporated key demographic variables.

**Results**

Control individuals were significantly more likely to have children than BP1 or SZ patients (controls 46.8%, BP1 15.9%, SZ 17.7%), but the BP1-SZ differences were non-significant. The average number of children for BP1 patients (0.370.9±) and SZ patients (0.380.9±) was significantly lower than for controls (1.041.48±) (BP1 vs controls, p among BP1 patients was nominally higher than the SZ group, but was significantly lower than controls (BP1: 31.9% SZ: 27.8% control: 57.3%). Even among married individuals, BP1 (but not SZ) patients were childless more often than controls (p=0.001). The marital fertility, i.e., the average number of children among patients with conjugal relationships for controls (1.81.57±) was significantly higher than BP1 patients (1.141.31±, p=0.02), but not significantly different from SZ patients (1.361.32±, p=0.2).

**Conclusion**

Selected reproductive measures are significantly and substantially reduced among Egyptian BP1 patients. The reproductive indices are similar among BP1 and SZ patients, suggesting a role for general illness related variables. Regardless of the cause/s, the impairment constitutes important, under-investigated disability.

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**Consanguinity and increased risk for schizophrenia in Egypt.**

**Abstract**

Background—Consanguinity has been suggested as a risk factor for psychoses in some Middle Eastern countries, but adequate control data are unavailable. Our recent studies in Egypt have shown elevated parental consanguinity rates among patients with bipolar I disorder (BP1), compared with controls. We have now extended our analyses to Schizophrenia (SZ) in the same population.

**Methods**—A case-control study was conducted at Mansoura University Hospital, Mansoura, Egypt (SZ, n = 75; controls, n = 126, and their available parents). The prevalence of consanguinity was estimated from family history data (self report), followed by DNA analysis using short tandem repeat polymorphisms (STRPs, n = 63) (DNA-based rates).

**Results**—Self reported consanguinity was significantly elevated among the patients (SZ: 46.6%, controls: 19.8%, OR 3.53, 95% CI 1.88, 6.64; p = 0.000058, 1 d.f.). These differences were confirmed using DNA based estimates for coefficients of inbreeding (inbreeding coefficients as means ±)
standard error, cases: 0.058 ±0.007, controls: 0.022 ±0.003).

Conclusions---Consanguinity rates are significantly elevated among Egyptian SZ patients in the Nile delta region. The associations are similar to those observed with BP1 in our earlier study. If replicated, the substantial risk associated with consanguinity raises public health concerns. They may also pave the way for gene mapping studies.