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ACCEPTED MANUSCRIPT

Bisphenol-A in Breast Adipose Tissue of Breast Cancer Cases and Controls

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Abstract

We evaluated whether bisphenol-A (BPA) could be quantified in breast adipose tissue samples provided by 36 breast cancer mastectomy patients and 14 reduction mammoplasty patients. Samples of breast adipose tissue were collected and BPA concentration was quantified using HPLC-ESI-MS/MS. BPA was detectable above the limit of quantitation of 0.38 ng/g in 30.6% of samples. BPA concentrations varied within- and between breasts and were similar between cases and controls (0.39 vs 0.41 ng/g, p=0.74).

Keywords: Bisphenol-A, breast, cancer, adipose, endocrine disruption

Introduction

Bisphenol-A (BPA) is an endocrine disrupting chemical, with exposure occurring primarily through leaching of BPA from plastic containers and cans into food and liquids [1].

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