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12-Week Comparative Clinical Trial with Low Dose Phentermine/Topiramate with Liraglutide on Obesity in Korea

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Abstract : The aim of the study is to investigate the clinical efficacy of combination therapeutic modalities using liraglutide (1.2mg/d) add on low-dose phentermine (7.5 mg/d)/topiramate (50mg/d) medication on the obese patient in the bariatric clinic. We assessed the retrospective cohort clinical analyses to the clinical efficacy of medication and combination in the patients who visited the bariatric clinic. We measured all participants' body fat (bioelectric impedance analysis), weight, height, and the cross-sectional areas of adipose tissues (umbilicus level) after keep fasting for 8 hours at 0, 4, 12 weeks. The design of the study was opened, paired t-test and Wilcoxon test were performed using SPSS for windows (ver.18, IL, USA) for comparison of weight, body fat, and adipose tissues. The participants were one hundred twenty-eight subjects aged 44.67 (1.18) years, 28.95 (0.39) kg/m^2, and female (82.7%). Their body fat was 40.57 (2.23%), and waist to hip ratio was 0.96 (0.01). The mean cross-sectional area of visceral adipose tissue was 142.59 (7.06) mm^2, and that of subcutaneous adipose was 274.37 (9.18) mm^2. 73 of them (57.5%) took medication only, 54 of them took medication with liraglutide for 12 weeks. The subjects in the medication group lost 5.4165 kg, 6.8069%, and those of the combination group did 6.2481 kg, 3.564%. The mean cross-sectional areas of visceral, subcutaneous adipose tissue in the medication group significantly decreased (p=.043), even more in the combination group. (p=.028). Further controlled clinical trials should be considered in the future. We conclude that the low dose of phentermine/topiramate with liraglutide therapeutic modalities would be more effective than phentermine/topiramate medication only in obesity treatment for 12 weeks.

Keywords : low dose phentermine, topiramate, liraglutide, obesity, efficacy
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