



ABSTRACT

Medical nutritional therapy on schizophrenic patient with grade 2 obesity and continued antipsychotic drug use

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Background and objectives : Patients suffering from schizophrenia have an elevated risk for obesity and metabolic syndrome due to multiple factors, including antipsychotic drug consumption. Diet and lifestyle modification remained the firstline modalities for management of obesity in patients with schizophrenia. Metformin has been recommended for preventing weight gain, including for schizophrenic patients with long-term consumption of psychiatric medication.

Method: This is a case report regarding a schizophrenic young; female patient with grade 2 obesity, high fat mass and low muscle mass. The patient also showed increased waist circumference, high total cholesterol, high LDL level, and low HDL level. Patient was monitored during hospital stay and continued for 10 weeks after discharge with routine contact on weekly basis. History of weight gain, psychiatric medication history, and dietary intake were recorded. Dietary intake data were collected using Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ) method and 24h food recall. Energy restriction, adjustment of protein and carbohydrate intake, physical activity encouragement and oral metformin administration, ranging of 500-1500 mg/day, were implemented during all monitoring periods. Caregivers were also encouraged to provide resources and support during monitoring.

Results: 2,1 kg weight loss (74,8 kg vs 72,7 kg) with subsequent reduction in BMI, reduced waist circumference of 8 cm (104 cm vs 96 cm), reduction of fat mass (34,7%; 25,9 kg vs 33,8%; 24,6 kg), improvement of muscle mass (24,2% vs 25,3%) were found in patient after 10 weeks home monitoring despite continued antipsychotic drug use.

Conclusion: Medical nutritional therapy combined with pharmacotherapy on patient with schizophrenia will have a benefit on reducing metabolic syndrome risk and even more greatly when supportive caregiver is present. Metformin might be beneficial as an adjunctive pharmacotherapy in schizophrenic patients.

Keywords: schizophrenia, obesity, energy restriction, metformin, metabolic syndrome

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