OP-006

Assessment of sleep pattern and quality before and after liver transplantation using different methods

Genco Gençdal[1], Gamze Türker[2], Işıl Yazıcı Gençdal[3], Burçak Ekinci[4], Şencan Acar[5], Ayhan Dinçkan[6], Murat Akyıldız[7]

[1]*Ataşehir Memorial Hastanesi, Organ nakil Merkezi, Gastroenteroloji Kliniği*
[2]*Yeni Yüzyıl ÜTF GOP Hastanesi, Göğüs Hastalıkları Kliniği*
[3]*Bakırköy Dr. Sadi Konuk. EAH Nöroloji Kliniği*
[4]*Adatıp İstanbul Hastanesi, Nöroloji Kliniği*
[5]*Ataşehir Memorial Hastanesi, Organ Nakil Merkezi,İç Hastalıkları*
[6]*İstinye Üniversitesi Tıp Fakültesi Hastanesi, Organ Nakil Merkezi, Genel Cerrahi Kliniği*
[7]*Koç ÜTF, Organ Nakil Merkezi, Gastroenteroloji Kliniği*

INTRODUCTION: Sleep disorders (SDs) are frequently seen in cirrhotics. Polysomnography (PSG), actigraphy and electroencephalogram (EEG) are common objective methods to diagnose SDs. The most commonly used subjective methods are the Pittsburgh Sleep Quality Index (PSQI) and Epworth sleepiness scale (ESS). In this study, we aimed to evaluate the effect of liver transplantation on SDs by using a combination of objective (PSG and EEG) and subjective methods (PSQI and ESS).

METHODS: Eighteen cirrhotic patients on a liver transplantation (LTx) waiting list were included in the study. Patient clinical status, biochemical parameters were evaluated. All patients completed validated Turkish forms of the PSQI and ESS before and nine-months after LTx. All patients underwent EEG and PSG before and nine-months after LTx.

RESULTS: Eighteen patients with liver cirrhosis (male: 12; 66.7%, mean age: 53.22 ± 10.43 years) were included in the study. Pre-transplant and nine-month post-transplant mean PSQI and ESS scores were 8.4 ± 3.11 and 7.28 ± 3.89; 4.5 ± 2.8 and 4.72 ± 2.91 ($p < 0.01$), respectively. Pre-transplantation, metabolic encephalopathy was detected in 6 of 18 patients by EEG, while metabolic encephalopathy was detected in only one patient post-transplant. Post-transplantation PSG sleep duration (all stages) increased relative to pre-transplant PSG values. Sleep latency (SL) and REM latency were found to be reduced relative to pre-transplant values.

CONCLUSION: This was a pilot study comparing SDs in pre- and post-liver transplant patients by combining subjective and objective methods. Significant SD improvements were found at the ninth month after transplantation.

Keywords: Sleep disorders, Liver cirrhosis, EEG,Polysomnography, PSQI, ESS

DOI: 10.5152/tjg.2019.06