Sleep and epilepsies mutually interact. Sleep and waking affect seizures occurrence and interictal epileptic activity is evident by sleep wake related timing of seizures. The effect of sleep deprivation on seizure provocation has been partly investigated. The impact of vigilance on epileptogenesis appears to be specific for the epilepsy syndrome. In idiopathic generalized epilepsy (IGE) seizures (absence, bilateral arm myoclonus and grand mal upon awakening) occur 1-2 hours after awakening, while focal frontal or temporal lobe epilepsies are prone to sleep bound nocturnal seizures. In some epilepsy syndromes, seizures occur exclusively during sleep (e.g. benign epilepsy with centro-temporal spikes-BECTS- or Lennox Gastaut Syndrome). Sleep is a potent activator of interictal epileptiform discharges (IED) in both IGE and focal epilepsies. In particular, NREM sleep facilitates the occurrence of IED while REM sleep appears to inhibit IED generation. The exact underlying mechanism(s) remain unknown. However, neurophysiological data suggest oscillations within the thalamo-cortical networks to generate physiological sleep spindles (the hallmark of NREM-sleep stage 2) and spike wave discharges. Patients with epilepsy often (up to 30% of cases) complain of poor sleep quality and excessive daytime sleepiness (EDS). EDS has frequently been referred to the side effects of anti-epileptic drugs (AEDs) or poor seizure control. Inefficient sleep and concomitant sleep disorders such as parasonmias, REM behavioral disorders (RBDs), restless leg syndrome (RLS) or periodic limb movement during sleep (PLMS) may all trigger neurocognitive incompetencies. These can also mimic epileptic seizures during sleep, in such a way that only can be differentiated by means of overnight polysomnography. Given the cognitive function of sleep (memory processing, motor procedural skills consolidation and emotional functions), inefficient sleep in epileptic patients needs specific consideration. Treatment of coexisting sleep disorders improves sleepiness and neuro-cognitive lapses and may positively contribute to a better seizure control.

**Key terms:** Sleep; Epilepsy; Interictal epileptiform discharges; Idiopathic generalized epilepsy; Antiepileptic drugs; Excessive daytime sleepiness