

Sleep Disturbances Resources

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A. Effects of Commonly Used Medications on Sleep Architecture

ABBREVIATIONS


Min = Minimally
 REM = rapid eye movement sleep
 SE = sleep efficiency
 SL = sleep latency
 SWS = slow wave sleep
 TST = total sleep time
 W = wakefulness

CLASS/DRUG	NEUROTRANSMITTER	SUBJECTIVE	POLYSOMNOGRAPHY
<u>TRICYCLIC ANTIDEPRESSANTS I</u> Amitriptyline Doxepin Imipramine Clomipramine	5-HT > NE reuptake inhibition	Sedation	↑TST ↓W ↓↓REM
<u>TRICYCLIC ANTIDEPRESSANTS II</u> Desipramine Nortriptyline Protriptyline	NE > 5-HT reuptake inhibition	May disrupt sleep	↑W ↓TST ↓↓REM
<u>SSRIs</u> Fluoxetine Paroxetine Sertraline Citalopram Escitalopram	5-HT reuptake inhibition	Insomnia	↑W ↓TST ↓REM
<u>SNRIs</u> Venlafaxine Desvenlafaxine Duloxetine	5-HT and NE reuptake inhibition	Insomnia and sedation	↑W ↓TST ↓↓REM

<u>5-HT ANTAGONIST/REUPTAKE INHIBITORS</u> Trazodone	5-HT antagonism / reuptake inhibition	Improves sleep	↑TST (min) ↓REM ↑SWS ↓SL ↓W
<u>SELECTIVE NE REUPTAKE INHIBITORS</u> Atomoxetine	Selective NE reuptake inhibition	Insomnia	↓REM ↓W IN ADHD ↑REM LATENCY
<u>ANTIMANIA AGENTS</u> Lithium	Alteration in transport and production of norepinephrine and serotonin	Sedation	↑SWS ↓REM
<u>TYPICAL ANTIPSYCHOTICS</u> Haldol Thiroidazine	Dopamine and 5-HT blockade	Sedation Insomnia	↑TST ↓SL ↓REM ↑SWS
<u>ATYPICAL ANTIPSYCHOTICS</u> Clozapine	Dopamine and 5-HT blockade	Sedation Insomnia	↓SL ↑TST ↑SWS
<u>ATYPICAL ANTIPSYCHOTICS</u> Olanzapine	Dopamine and 5-HT blockade	Sedation Insomnia	↓SL ↑TST ↑SWS
<u>ATYPICAL ANTIPSYCHOTICS</u> Quetiapine	Dopamine and 5-HT blockade	Sedation Insomnia	↓SL ↑TST ↓REM
<u>ATYPICAL ANTIPSYCHOTICS</u> Risperidone	Dopamine and 5-HT blockade	Sedation Insomnia	↓SL ↑RST ↓REM ↑SWS
<u>BENZODIAZEPINES</u>	GABA agonism	Sedation	↓SL ↓SWS ↓REM

<p><u>ANTICONVULSANT</u></p> <p>Carbamazepine</p>	<p>Sodium channel blockade</p>	<p>Sedation</p>	<p>↓SL ↑TST ↓REM ↑SWS</p>
<p><u>ANTICONVULSANT</u></p> <p>Valproic acid</p>	<p>GABA agonism Sodium channel blockade Calcium channel inhibition</p>	<p>Sedation</p>	<p>↑TST ↓W ↑SL</p>

B. Makley Observation Sleep Scale (MOSS)

0	FULLY ASLEEP	
1	MORE ASLEEP THAN AWAKE	
2	MORE AWAKE THAN ASLEEP	
3	FULLY AWAKE	

Makley, M.J., English, J.B., Drubach, D.A., Kreuz, A.J., Celnik, P.A., & Tarwater, P.M. (2008). Prevalence of sleep disturbance in closed head injury patients in a rehabilitation unit. *Neurorehabilitation and Neural Repair*, 22(4), 341-7. doi: [10.1177/1545968308315598](https://doi.org/10.1177/1545968308315598)

C. Example of a nursing observation log

SLEEP-WAKE LOG

Patient: _____

Medications:

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

Time/Date	2300	2400	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	
Day 1-																									
Day 2-																									
Day 3-																									
Day 4-																									
Day 5-																									
Day 6-																									
Day 7-																									
Day 8-																									
Day 9-																									
Day 10-																									
Day 11-																									
Day 12-																									
Day 13-																									
Day 14-																									

Sleep Assessment Scale:

0 Sleeping

1 Drowsy/falling asleep

2 Awake, but drowsy

3 Awake