우울증 환자의 수면장애 개선

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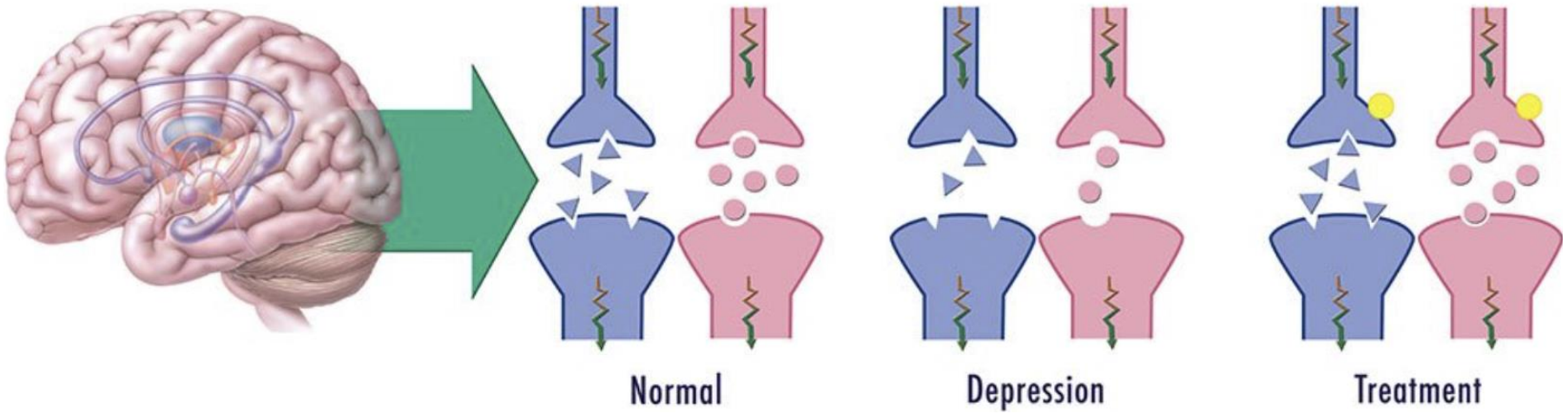
Contents

Introduction

- Insomnia common (>80%) in major depressive disorder (MDD)
- Often leads to early awakening, fragmented sleep
- Poor sleep exacerbates depression severity and relapse risk
- Effective sleep treatment → improved depression outcomes

APA, 2023; AASM Guidelines, 2021



Pathophysiology

- **NT dysregulation**: serotonin, norepinephrine, dopamine
- **HPA axis overactivation** → hyperarousal
- Reduced deep (slow-wave) sleep, increased REM intensity
- Bidirectional relationship: insomnia & depression

Murphy & Peterson, 2015; Baglioni et al., 2020

Clinical Assessment of Insomnia

01

Detailed sleep history: latency, awakenings, duration etc.

02

Screening: **ISI, PSQI** questionnaires helpful

03

Sleep diary (1-2 weeks) identifies patterns

04

R/O medical causes (OSA, RLS, pain, substances)

Buysse et al., 1989; Morin et al., 2011

한국판 불면증 심각도 척도 (ISI-K)

이름(성별)		생년월일		실시일	

아래에 문항을 잘 읽으신 후, 지난 2주 동안 당신의 수면상태를 가장 잘 나타낸다고 생각되는 문항에 ✓표를 하십시오. 한 문항도 빠짐없이 답해 주시기 바랍니다.

	문 항					
1	최근 2주동안에 당신의 불면증의 심한 정도를 아래에 표시하십시오.					
		전혀 없음	약간 있음	중간	심함	매우 심함
	1) 잠들기 어려움	0	1	2	3	4
	2) 잠을 유지하기 어려움 (자주 깸)	0	1	2	3	4
	3) 새벽에 너무 일찍 잠에서 깸	0	1	2	3	4

2	당신의 현재 수면 패턴에 얼마나 만족하십니까?	매우 만족함	만족함	중간	불만족	매우 불만족
		0	1	2	3	4

3	불면증으로 인한 삶의 질 손상 정도가 다른 사람들에게 어떻게 보인다고 생각합니까?	전혀 현저하지 않음	조금 현저함	다소 현저함	많이 현저함	매우 많이 현저함
		0	1	2	3	4

4	현재 불면증에 관하여 얼마나 걱정하고 있습니까?	전혀 걱정하지 않음	조금 걱정함	다소 걱정함	많이 걱정함	매우 많이 걱정함
		0	1	2	3	4

5	당신의 수면 문제가 일상 생활(예: 낮 동안 피곤함, 업무 또는 일상적 가사능력, 집중력, 기억력, 기분, 등)을 어느 정도 방해한다고 생각합니까?	전혀 방해되지 않음	조금 방해됨	다소 방해됨	많이 방해됨	매우 많이 방해됨
		0	1	2	3	4

※ 점수가 높을수록 불면증이 심함을 의미

0~7점	8~14점	15~21점	22~28점
불면증 아님	경미한 수준	중한 수준	심각한 수준

Differential Diagnoses

- Medication/substance-induced insomnia (SSRIs, caffeine, alcohol)
- Obstructive Sleep Apnea (OSA)
- Restless Leg Syndrome (RLS)
- Circadian rhythm disorders (shifted sleep schedules)
- Anxiety (racing thought), PTSD (nightmares), chronic pain, medical illnesses

Schutte-Rodin et al., 2008; APA, 2023

우울증 환자에서 불면증 치료

- 비약물적 치료
- 약물 치료

Non-pharmacological Treatment (1): **Sleep Hygiene**

- Consistent sleep schedule daily
- Avoid evening caffeine, alcohol, heavy meals
- Limit electronic device usage before bedtime
- Regular daytime physical activity
- Avoid prolonged daytime napping

Irish et al., 2015; AASM Guidelines, 2021

Non-Pharmacological Treatment (2): **CBT-I**

- Gold-standard 1st-line treatment for insomnia
- Components: **Stimulus control**, **sleep restriction**
- **Cognitive restructuring**: correct insomnia-related beliefs
- Proven durable efficacy, boosts depression remission

Qaseem et al., 2016; Trauer et al., 2015

Digital CBT-I

- Delivered via websites or mobile apps
- Effective alternative to face-to-face CBT-I
- Improves insomnia severity, adherence, depression outcomes
- Accessible, convenient, cost-effective
- Useful in primary care as initial or adjunctive therapy
- Example apps in Korea: Somzz, SleepQ

Mindfulness & Relaxation Techniques

- Reduce nighttime hyperarousal
- **Mindfulness meditation** reduces insomnia, depressive symptoms
- **Progressive muscle relaxation**, **deep breathing** effective
- Adjunctive role in managing chronic insomnia

Ong et al., 2014; Black et al., 2015

Pharmacological Treatment: Overview

- Consider if non-pharmacological ineffective or severe insomnia
- Select medications targeting sleep symptoms, coexisting conditions
- Antidepressants, hypnotics (short-term), melatonin agents, atypical antipsychotics
- Start low, adjust dose gradually, monitor closely

Pharmacological (1): **Sedating Antidepressants**

- **Mirtazapine**: improves sleep continuity, increases appetite
- **Trazodone**: common off-label insomnia use, non-addictive
- **Doxepin**: FDA-approved insomnia, good elderly safety
- **Agomelatine**: improves circadian rhythms, fewer side effects

Wichniak et al., 2017; Jaffer et al., 2017

Pharmacological (2): **Benzodiazepines & Z-drugs**

- Effective short-term (2-4 weeks), risk of dependency
- Z-drugs (zolpidem, eszopiclone, zaleplon): rapid onset, lower hangover
- Benzodiazepines:

	Generic Drug	Approximate Dosage Equivalents (mg)	Time to Peak Plasma Level (Hours)	Elimination Half-Life (Hours)	Metabolite Activity
수면개시	Alprazolam	0.5	1–2	12–15	Inactive
	Chlordiazepoxide	10–25	2–4	24–48 (>96*)	Active
수면유지	Clonazepam	0.25–0.5	1–4	30–40	Inactive
	Diazepam	5	1–2	44–48 (50–100*)	Active
	Lorazepam	1	1–6	10–20	Inactive

Schroeck et al., 2016; APA, 2023

Pharmacological Treatments: Cautions

- Limit BDZ/Z-drugs use (≤ 4 weeks) to avoid tolerance, dependency
- Side effects: daytime sedation, cognitive impairment, falls
- Special caution in elderly (confusion, delirium, fall risk)
  - ✓ Prefer safer options: CBT-I, doxepin (low-dose), melatonin
- Monitor carefully, **prescribe lowest effective dose**

American Geriatrics Society Beers Criteria, 2019

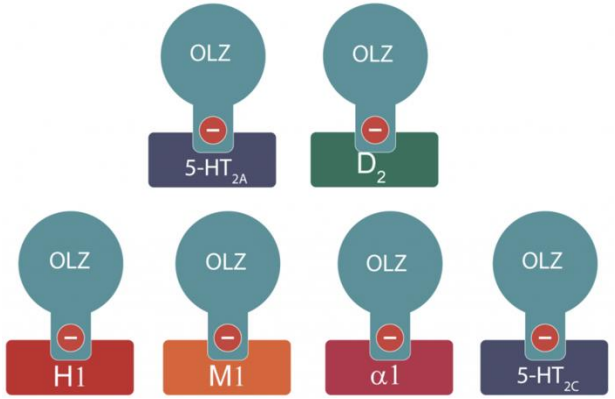
Melatonin & Emerging Options

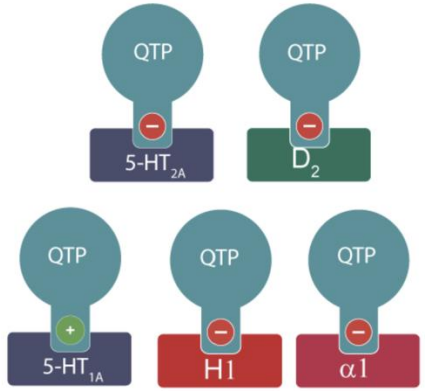
- Melatonin: safe for circadian insomnia, mild effect
- OTC melatonin widely used, safe for most patients
- Gabapentin, pregabalin: useful if comorbid anxiety/pain

Ferracioli-Oda et al., 2013; Krystal et al., 2019

Atypical Antipsychotics (Low-Dose)

- Sedative properties beneficial for severe insomnia
- Quetiapine (12.5-50mg): effective sleep induction & maintenance
- Olanzapine (low-dose): insomnia with bipolar/anxiety
- Significant s/e: weight gain, metabolic syndrome risk





Schroeck et al., 2016; APA, 2023

Comorbid Medical Conditions

- Screen and treat:
  - **OSA**: worsened by sedatives, requires CPAP
  - **RLS**: iron supplementation, dopamine agonists (e.g., ropinirole), gabapentin
  - **Chronic pain**: multimodal management needed
- Menopausal symptoms: consider hormone therapy, clonidine, CBT-I

Schutte-Rodin et al., 2008; APA, 2023

Clinical Considerations in Primary Care

- **Educate patients**: realistic expectations, adherence importance
- Sleep diary/ISI/PSQI to track progress objectively
- Re-evaluate regularly; adjust or escalate treatment if needed
- Early identification prevents depression relapse

Suicide Risk & Insomnia

- Severe insomnia significantly increases suicide risk
- Routinely assess suicidal ideation in depressed insomniacs
- Limit sedatives in high-risk patients (small prescription amounts)
- Early psychiatric referral if risk identified

McCall & Black, 2013; Pigeon et al., 2019

Collaborative Care & Psychiatric Referral

Refer if:

- Severe insomnia despite adequate primary treatment
- Complex pharmacological needs (e.g., antipsychotics, lithium)
- High suicide risk or significant psychiatric comorbidities

Collaborative care improved treatment outcomes

APA Collaborative Care Guidelines, 2022

Summary & Clinical Take-Home Points

1) **Insomnia integral to depression management**
2) **Always assess, monitor, and manage sleep proactively**
3) **Prioritize CBT-I, careful pharmacological approach**
4) **Optimize medications considering patient characteristics**
5) **Involve psychiatry early if complexity or high-risk factors**

경청해 주셔서 감사합니다!