

**Anxiety disorders III**  
***Case Management Discussion***  
***including Psychotherapy***

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# Management plan

- 1. More Investigations**
- 2. Admission or not?**
- 3. Education and Reassurance.**
- 4. BioPsychoSocial approach.**

# **Management**

```
graph TD; Management[Management] --> Bio[Bio]; Management --> Psycho[Psycho]; Management --> Social[Social]; Bio --> BioList["Medications:  
SSRI  
TCA  
Benzodiazepines  
Buspirone"]; Psycho --> PsychoList["Psychotherapy:  
CBT  
Psychodynamic"]; Social --> SocialList["Sick leave  
Financial Support  
Social support"];
```

## **Bio**

**Medications:**  
SSRI  
TCA  
Benzodiazepines  
Buspirone

## **Psycho**

**Psychotherapy:**  
CBT  
Psychodynamic

## **Social**

**Sick leave  
Financial Support  
Social support**

# Prescribing a Psychotropic Agent After Diagnostic Assessment

- Choose a medication based on FDA approval
- Family or personal hx of response
- Adverse effects vs. key symptoms
- Starting dose
- Monitor side effects & clinical response
- Adjust dose if needed

# **Sedatives, Hypnotics, Anxiolytics**

- **Benzodiazepines**
- **Barbiturates (not used)**
- **Antihistamines**
- **Beta-blockers**
- **Buspirone**
- **Zolpidem**

# **General Definitions**

- **Sedative: Calm down, treat agitation**
- **Hypnotic: Induce sleep**
  - go to sleep fast, feel refreshed tomorrow !!!
- **Anxiolytic: Reduce anxiety**
  - physical, emotional, cognitive

# Sedatives: History

- **Alcohol, the oldest known sedative**
  - *“When Noah left the Ark he planted a vineyard, drank the wine, and was drunken, and he was uncovered within his tent.”*  
Genesis
- **1900 Barbiturates:** narrow therapeutic range
- **1960’s Chlordiazepoxide [Librium]**

# **Benzodiazepines (BZD): Mechanism of Action**

- **BDZ recept linked to GABA-A receptor complex (bound to Cl channels).**
  - **BDZ enhance GABA effect.**
  - **GABA: an inhibitory neurotransmitter**
- **Effects: Sedative, Hypnotic, Anticonvulsant, Muscle-Relaxant**



# **BZD: Interactions**

- **CNS Depressants**
- **p450 2C9**
  - Diazepam, TCAs, Warfarin, phenitoin.  
(luvox inhibit)
- **p450 3A4**
  - triazolam, midazolam, alprazolam, CBZ,  
quinidine, terfenadine, erythromycin,  
(luvox, serzone inhibit)
- **Disulfiram & Cimetidine ↑BZD levels**

# **Benzos: Patterns of Use**

- **45% of Use <30 days**
- **80% of Use <4 months**
- **15% of Use >12 months (7-18% Europe)**
- **Women, twice the rate as men**
- **<40% of Anxiety Diagnosis Treated**
- **>40% of Panic Disorder Treated**

# **BZD: Adverse Effects**

- **BZD vs other psychotropics have few SE**
- **Sedation, CNS Depression**
  - Worse if combined with EtOH
- **Behavioral Disinhibition**
  - Irritable, excitement, aggression (<1%), rage
- **Psychomotor & Cognitive Impairment**
  - coordination, attention (driving)
  - poor visual-spatial ability (not aware of it)
  - Ataxia, confusion

# **BZD: Adverse Effects**

- **Overdose: Rare fatalities if BZD alone**
- **Severe CNS & Respiratory Depression if combined with:**
  - alcohol
  - barbiturates
  - narcotics
  - tricyclic antidepressants

# **BZD: Dependence & Withdrawal**

- Except diazepam, low abuse potential if properly prescribed and supervised
- Alprazolam & Triazolam low street value due to sedation
- ↑lipophilic, ↑abuse potential
- Short  $t_{1/2}$  more intense withdrawal

# **BZD: Withdrawal**

- **Worse if stop abruptly**
- **Symptoms**
  - **GI Sx, Diaphoresis, ↑pulse, ↑BP**
  - **Tremor, lethargy, dizziness, headaches**
  - **Restlessness, insomnia, irritability, anxiety**
  - **Depersonalization, perceptual disturbances**
- **Also: depression, tinnitus, delirium, panic, hallucinations, abnormal muscular moves.**
- **Seizures: abrupt discontinue of short acting**
- **Treatment: Long half-life benzo**

# Barbiturates

- Not used for anxiety or insomnia
- **Potentially Fatal Respiratory Depression**
  - narrow therapeutic range
- **Potent liver inducers: interactions**
- **Ultra-short  $t_{1/2}$ : IV Gen Anesthesia**
  - thiopental, methohexital
- **Sedative**
  - Amobarbital (amytal), pentobarbital
- **Phenobarbital: anticonvulsant**

# **Antihistamines**

- **Tx of anxiety & insomnia, Non-addicting**
- **Some anticholinergic effects**
- **Diphenhydramine [Benadryl] phenergan**
  - **25-100 mg hs sleep OR 10-25 mgr prn anxiety**
- **Hydroxyzine [Atarax]**
  - **25-100 mg hs sleep**
  - **10-25 mg 1-4 times/day**



# **Beta-blockers**

- **Physiologic component of anxiety:**
  - tachycardia, palpitations, tremor, sweating
- **No CNS depression**
  - non-addicting, no drowsiness
- **Do not use in asthma, diabetes, CHF**
  - monitor BP, pulse
- **Helpful for performance anxiety:**
  - propranolol 10 mg prn

# **Buspirone [BuSpar]**

- **5-HT-1A mixed agonist-antagonist, weak DA block**
- **Not a benzo, not hypnotic, no tolerance, no dependence, no w/d**
- **Anxiolytic?, possible efficacy (?)**
- **No anticonvulsant activity, will not protect from withdrawal symptoms**
- **Start 5 mg tid, max 60 mg/day**

# **Zolpidem [Ambien]**

- **Acts on Benzo type-1 receptor (sleep)**
- **Fast onset 30 min-2 hrs**
- **Elimination  $t_{1/2}$  3 hrs**
- **increases quality of slow wave sleep, no effect on REM**
- **Minimal rebound insomnia, anxiety, or am sedation**
- **Probable less abuse potential, (caution)**

# Summary