

Mood disorders III
Case Management Discussion
including ECT

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Huda

- Huda is a 25 yr-old single female teacher. She had an episode -of at least 2 weeks duration- of low mood associated with loss of interest, isolation, crying spells, excessive guilt feelings, death wishes, suicidal ideation and reduction in libido. Her mother has history of bipolar disorder and one of her sisters had post-partum psychosis.

Case Development 1:

- When she was 20 years, she had an episode of irritable mood, talkativeness, hyperactivities, decrease need for sleep, taking off her clothes in front of her adult brother. It lasted for 3 week.

Case Development 2:

- Premorbidly, she described herself with chronic sense of boredom, and having difficulties to keep friends.

Case Development 3:

- Her mother reported that her daughter was complaining of fever and headache few days prior the episodes when she was 20. She also reported that her daughter had new problematic friends few months prior that episode and she is suspecting the use of illicit drugs.

Case Management Discussion including ECT:

1. Discuss the types of **antidepressants**, indication, side effects, etc
2. Discuss the types of **mood stabilizers**, indication, side effects, etc
3. Discuss the use of **antipsychotics** and **benzodiazepine**
4. Discuss the role of **psychotherapy**
5. Discuss about **ECT**, description, indication, side effects, etc

Management plan

1. Hx and MSE, Physical Exam
2. More Investigations
3. Admission or not?
4. Education and Reassurance.
5. BioPsychoSocial approach.

Indications for admission

1. Danger to self
2. Danger to others
3. Total inability to function
4. Medical conditions that warrant medication monitoring
5. Observation and clarify Diagnosis

Indications of Inpatient Treatment

1. Danger to self

- A depressed patient may have suicidal ideation, attempts or plans.
- A person who is depressed enough to not eat might be at risk of death.
- A person in extreme mania who foregoes sleep or food may be in a state of serious exhaustion.

Indications of Inpatient Treatment

2. Danger to others

- A patient experiencing a severe depression may believe the world was so bleak that he plans to kill his children to spare them from the world's misery.
- A delusional patient having a manic episode may believe everyone was against him; he searches for a rifle in order to defend himself and to get them before they got him.

Indications of Inpatient Treatment

3. Total inability to function

- Leaving such a person alone would be dangerous and not therapeutic.

4. Total loss of control

1. The patient's behaviors may go totally out of control to harm themselves & others and may destroy their career & social position.

Indications of Inpatient Treatment

5. Medical conditions that warrant medication monitoring
 - Such as cardiac and renal conditions where the effects of the psychotropic medications can be monitored and observed closely.

Outpatient Treatment Goals 1

- 1. Look at areas of stress and find ways to handle them:** The stresses can stem from family or work, This is a form of psychotherapy.
- 2. Monitor and support the medication:** Patients are ambivalent about their medications and they resent that they need them. The job is to address their feelings and allow them to continue with the medications.

Outpatient Treatment Goals 2

- 3. Develop and maintain the therapeutic alliance:** Over time, the strength of the alliance helps keep the patient's symptoms at a minimum and helps the patient remain in the community.
- 4. Provide education (see Patient Education):** Both the patient and the family need to be aware of the dangers of substance abuse, the situations that would lead to relapse, and the essential role of medications.

Pharmacologic Therapy 1

- Appropriate medication depends on the stage the patient is experiencing.
- A number of drugs are indicated for an acute manic episode, primarily the antipsychotics, valproate, and.
- The choice of agent depends on the presence of symptoms such as psychotic symptoms, agitation, aggression, and sleep disturbance.

Management

```
graph TD; Management[Management] --- Bio[Bio]; Management --- Psycho[Psycho]; Management --- Social[Social]; Bio --- BioList["Medications<br/>ECT<br/>rTMS<br/>DBS"]; Psycho --- PsychoList["Psychotherapy:<br/>CBT<br/>IPT<br/>Psychodynamic"]; Social --- SocialList["Sick leave<br/>Financial Support<br/>Social support"];
```

Bio

Medications

ECT
rTMS
DBS

Psycho

Psychotherapy:

CBT
IPT
Psychodynamic

Social

Sick leave
Financial Support
Social support

Summary of Medications Role in Psychiatry

- They are part of a comprehensive treatment plan.
- Basic knowledge of medications is important in daily clinical practice.
- Their prescription by the psychiatrist follows a systematic approach

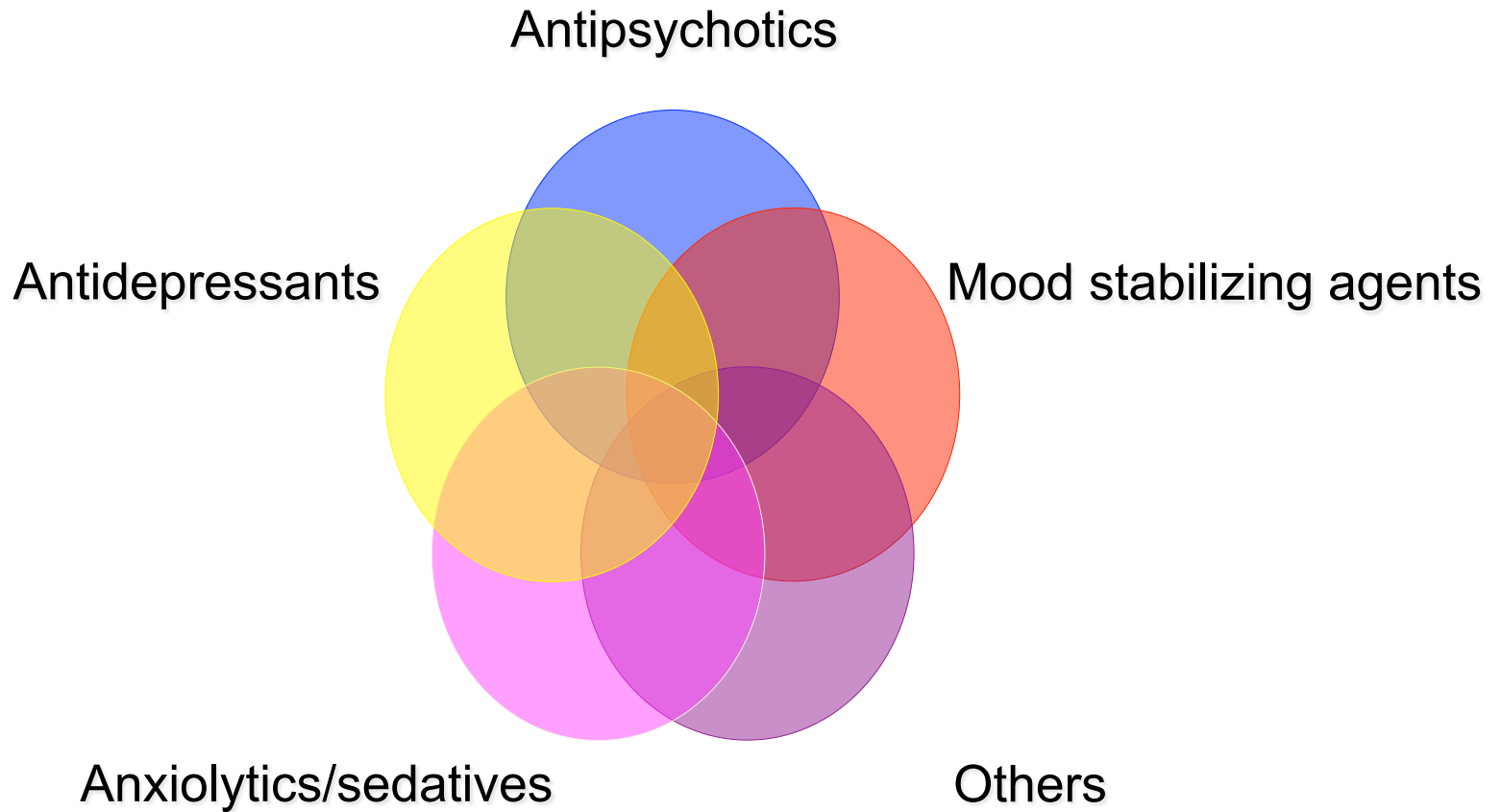
General principles about adverse effects

- Psychopharmacological agents affect the whole body.
- Remember the common and dangerous side effects.
- They indicate the drug is working.

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

Psychopharmacologic Drugs Work over A Spectrum



Antidepressant

```
graph TD; A[Antidepressant] --> B[TCA]; A --> C[SSRI]; A --> D[SNRI]; B --> B1[Amitriptyline]; B --> B2[Clomipramine]; B --> B3[Imipramine]; C --> C1[Fluoxetine]; C --> C2[Paroxetine]; C --> C3[Citalopram]; C --> C4[Escitalopram]; C --> C5[Fluvoxamine]; C --> C6[Sertraline]; D --> D1[Venlafaxine]; D --> D2[Desvenlafaxine]; D --> D3[Duloxetine];
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TCA

Amitriptyline
Clomipramine
Imipramine

SSRI

Fluoxetine
Paroxetine
Citalopram
Escitalopram
Fluvoxamine
Sertraline

SNRI

Venlafaxine
Desvenlafaxine
Duloxetine

Antidepressants

- Used in many psychiatric disorders other than Depression.
- Full clinical response in **6-8 weeks** in major depression, up to **6/12** in obsessive compulsive disorder.

Examples:

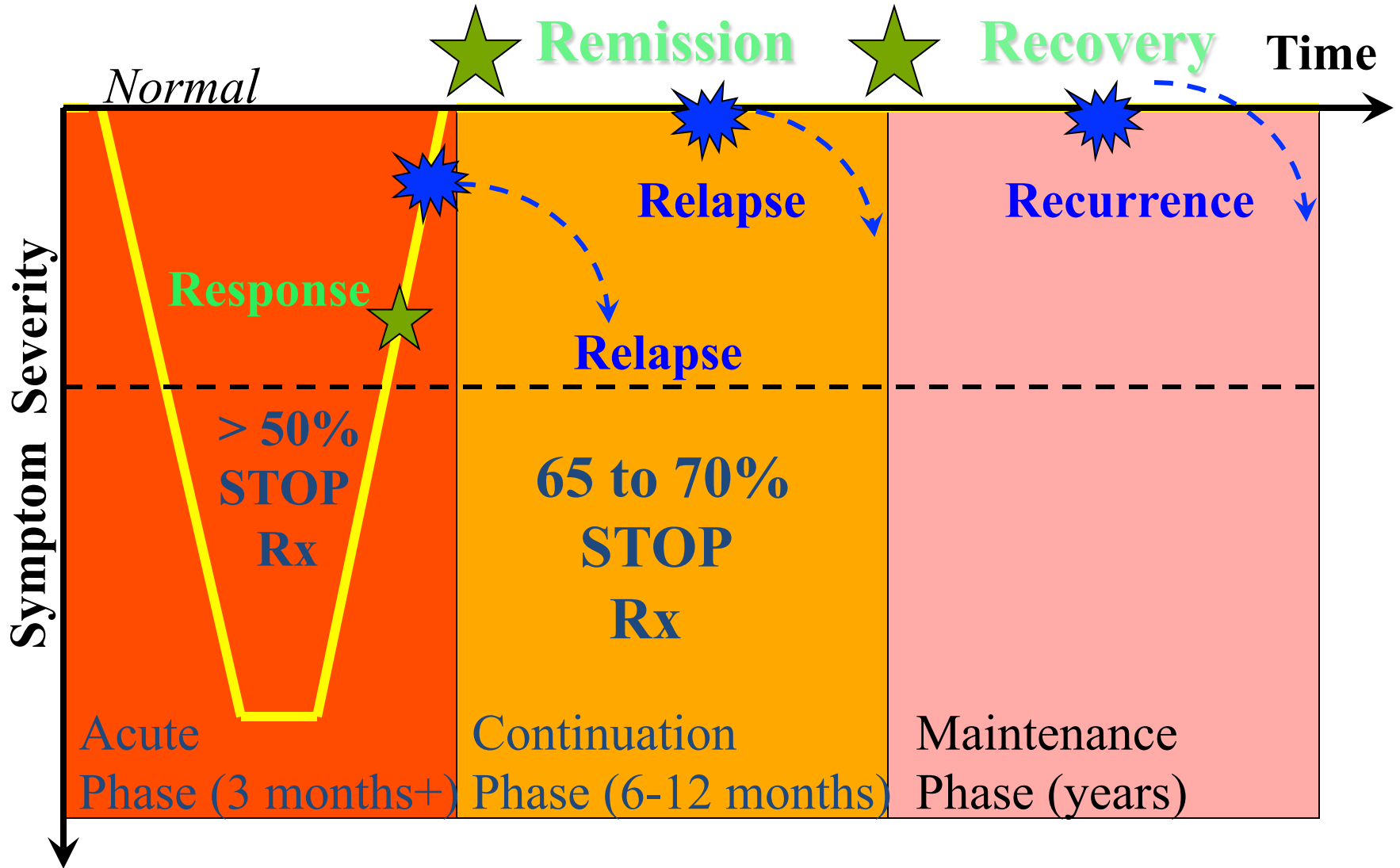
Fluoxetine (20-80 mg/d)

Paroxetine (20-50 mg/d)

Fluvoxamine & Sertraline (50-200 mg/d)

Imipramine(75-300 mg/d)

THREE PHASES OF TREATMENT



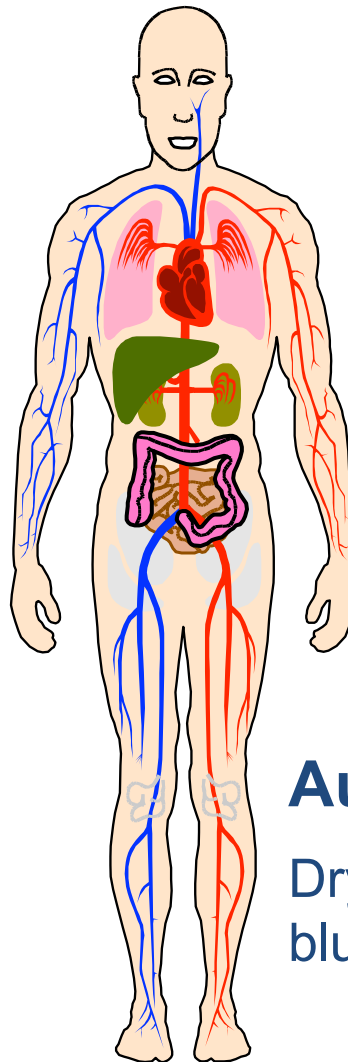
Potential Adverse Effects of Antidepressant Therapy

Cardiac

Orthostasis
hypertension
heart block,
tachycardia

Urogenital

Erectile dysfunction,
ejaculation disorder,
anorgasmia,
priapism



Central Nervous System

Dizziness, cognitive impairment,
sedation, light-headedness,
somnolence, nervousness,
insomnia, headache, tremor,
changes in satiety and appetite

Gastrointestinal

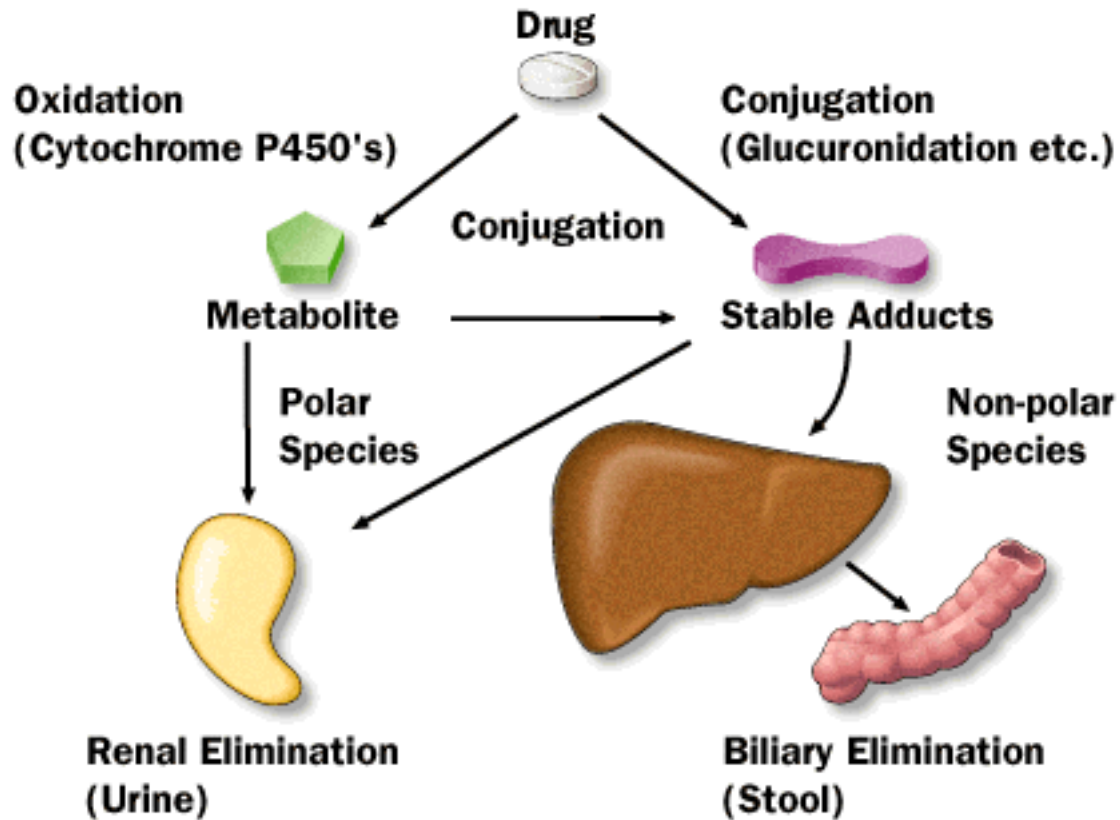
Nausea, constipation,
vomiting, dyspepsia,
diarrhea

Autonomic Nervous System

Dry mouth, urinary retention,
blurred vision, sweating

Antidepressants	Dose	Anticholinergic Effects	Sedation	Orthostatic Effects	Sexual Effects	GI Upset	Cardiac Arrhythmia	Agitation/Insomnia	Weight Gain	Half Life	Comments
Tricyclics											
Amitriptyline (Elavil) generic Y < \$10.00	100-300mg/d	++++	++++	+++	+++	+	+++	None	++++	31-48 hrs	Neuropathic Pain/ Hypnotic
Desipramine (Norpramin) generic Y \$5.00-\$15.00	100-300mg/d	+	++	++	+++	None	++	+	+	12-24 hrs	
Doxepin (Sinequan) generic Y \$5.00-\$10.00	100-300mg/d	+++	++++	++	+++	None	++	None	++++	8-24 hrs	
Imipramine (Tofranil) generic Y < \$10.00	100-300mg/d	+++	+++	++++	+++	+	+++	None	++++	11-25 hrs	
Nortriptyline (Pamelor) generic Y \$5.00-\$10.00	50-200mg/d	++	++	+	+++	None	++	None	+	18-44 hrs	Therapeutic Window 50-150mg/ml
SSRI's											
Citalopram (Celexa) generic Y \$60.00-\$125.00	20-60 mg/d	None	None	None	+++	+++	None	+	+	24-48 hrs	Used for neuropathic pain Nausea mild and transient
Fluoxetine (Prozac) generic Y <\$20.00	20-80 mg/d	None	None	None	++++	+++	None	++++	+	48-216 hrs	Nausea mild and transient
Paroxetine (Paxil, Paxil CR) generic Y <\$60.00	20-80 mg/d	+	+	None	++++	+++	None	+	++	10-24 hrs	Nausea mild and transient
Sertraline (Zoloft) generic N \$50.00-\$150.00	50-200 mg/d	None	None	None	++++	+++	None	++	+	26->100 hrs	Nausea mild and transient
Escitaloprom oxalatel (Lexapro) generic N \$50.00-\$75.00	10-20 mg/d	None	None	None	+	++	None	+	+	27-32 hrs	Majority of pts only require 10mg/day
SNRI's											
Venlafaxine HCl (Effexor, Effexor XR) generic N \$50.00-\$250.00	37.5-375 mg/d	+	+	None	+++	+++	+	++	None	6-11 hrs	Therapeutic Window 50-150mg/ml Nausea mild and transient
Norepinephrine/Dopamine RI											
Bupropion (Wellbutrin) generic Y <\$50.00	150-450 mg/d	None	None	None	None	+	+	++++	None	8-24 hrs	Contraindicated w/ seizures
Other Antidepressants											
Maprotiline (Ludiomil) generic Y <\$50.00	100-225 mg/d	++	+++	++	++	None	+	None	++	21-25 hrs	Related to TCA's
Mirtazapine (Remeron) generic N \$50.00-\$75.00	15-45 mg/d	+	+++	+	None	None	+	None	+++	20-40 hrs	
Nefazodone (Serzone) generic N \$75.00-\$150.00	300-800 mg/d	+	+	++	None	+	+	+	None	2-4 hrs	Contraindicated w/ carbamazepine Taken off market in Europe
Trazodone (Desyrel) generic Y <\$20.00	150-600 mg/d	None	++++	+++	None	+	+	None	++	4-9 hrs	

Antidepressants and the Cytochrome P450 System



Antidepressants and the Cytochrome P450 System

- Antidepressants and mood stabilizers may be **inhibitors**, **inducers** or **substrates** of one or more cytochrome P450 isoenzymes
- Knowledge of their **P450 profile** is useful in predicting drug-drug interactions
- When some isoenzymes are absent or inhibited, others may offer a **secondary metabolic pathway**
- **P450 1A2, 2C (subfamily), 2D6 and 3A4** are especially important to antidepressant metabolism and drug-drug interactions

SSRI S/E

- Headache
- Nausea
- Stomach ache
- Decrease libido
- Wt gain
- Sedation
- Drug Drug interaction

TCA

- Headache
- Nausea / vomiting
- Dry mouth
- Constipation
- Cardiac problems
- Decrease libido
- sedation

Mood Stabilizers

- Lithium, Valproic acid, Carbamazepine, Lamotrigine, Gabapentine, Topiramate.
- Used in the treatment of **Bipolar disorder** and similar conditions associated with impulsivity.
- **Drug level measurements** are available for many of them.
- Mechanism of action is not clearly understood.

Common Mood Stabilizers

	Carbamazepine	Valproic Acid	Lithium
Therapeutic Level	4-12 mg/ml	40-100 mg/ml	0.5-1.2 mEq/L
Common S/E	Dizziness, sedation, ataxia, leukopenia, rash,	nausea, diarrhea, ataxia, dysarthria, weight gain, slight elevation of hepatic transaminases	nausea, hypothyroidism, tremors, dysarthria, ataxia
Dangerous S/E	Agranulocytosis, teratogenicity (neural tube defect), <i>induction of hepatic metabolism</i>	teratogenic (neural tube defects)	sinus node dysfunction, T-wave changes, teratogenic (cardiac anomalies)

Antipsychotics

- Treat psychotic symptoms + mood stabilizers
- Divided into:

Typical/1st generation = D2 receptor antagonist

Effective against +ve > -ve

Atypicals/2nd generation = Serotonin-dopamine antagonists

Effective against both +ve & -ve sx

- Requires ~ one month for significant antipsychotic effect

Antipsychotics

Average Daily Doses in mg

Typicals

Haloperidol (5-15)

Thioridazine(100-300)

Chlorpromazine (50-400)

Atypicals

Risperidone (4-8)

Olanzapine (10-20)

Quetiapine (600-1200)

Clozapine (100-600)

Lower numbers indicate higher potency

MEDICATION	EXTRA-PYRAMIDAL SIDE EFFECTS / TARDIVE DYSKINESIA	PROLACTIN ELEVATION	WEIGHT GAIN	GLUCOSE PROBS.	LIPID PROBS.	CARDIAC PROBS.	SEDATION	HYPOTENSION	ANTICHOLINERGIC SIDE EFFECTS	SEXUAL DYSFUNCTION	'Normal Adult Dose Range
Olanzapine (Zyprexa)	Rare ^e	Rare	High	High	High	Rare	Low	Low	Moderate	Low	5mg to 20mg OD
Risperidone (Risperdal)	Low	High	Moderate	Moderate	Moderate	Low	Low	Low	Rare	Moderate	4mg to 16mg OD (in divided doses) (maintenance dose)
Amisulpride (Solian)	Low	Moderate	Rare	?	?	?	Rare	Rare	Rare	High	50mg to 1.2g OD (in divided doses)
Quetiapine ^a (Seroquel)	Rare ^e	Rare	Moderate	Moderate	Moderate	Rare	Moderate	Moderate	Rare	Low	300mg to 750mg OD (in divided doses) (maintenance dose)
Aripiprazole ^d (Abilify)	Rare ^e	Rare	Rare	Rare	Rare	Rare	Low	Moderate	Rare	?	
Clozapine ^b (Clozaril)	Rare ^e	Rare	High	High	High	Rare	High	High	High	Low	150mg to 900mg OD (maintenance dose)

Comparison between Different Atypical Antipsychotics

Anxiolytics/sedatives

- Benzodiazepines, Trazodone, Zolpidem and others
- Alprazolam, clonazepam, lorazepam, diazepam.
- Risk of dependence & withdrawal.

Other pharmacological agents

Cholinesterase inhibitors:

Donepezil, Rivastigmine, Galantamine, (Tacrine has been withdrawn)

Sympathomimetics:

Methylphenidate, Dextroamphetamine.

Anticholinergic agents:

Procyclidine, Benztropine

Dangerous Side Effects

Hypertensive crisis

Associated with MAOIs.

Neuroleptic malignant syndrome

Autonomic instability, severe EPS, delirium, ↑CK, ARF, myoglobinuria

Serotonin syndrome

Restlessness, myoclonus, ↑reflexes, tremors, confusion.
Due to combination of serotonergic agents

Agranulocytosis

(Clozapine, carbamazepine).

Failure of Response

What to do?

- Check Compliance & availability
- Review the diagnosis
- Is the dose appropriate?
- Is the duration of treatment long enough?
- Any ongoing substance abuse?
- Other drugs/preparation causing drug-drug Interaction?
- Individual Variation?

مجموعة أوثق

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Electro Convulsive Therapy - ECT

ECT is used to treat:

- Severe depression
- Treatment-resistant depression
- Severe mania
- Catatonia
- Agitation and aggression in people with dementia
- During pregnancy
- In older adults who can't tolerate drug side effects
- In people who prefer ECT treatments over taking medications
- When ECT has been successful in the past

Electro Convulsive Therapy - ECT

Although ECT is generally **safe**, risks and **side effects** may include:

- *Confusion.*
- *Memory loss.*
- *Physical side effects:* nausea, vomiting, headache, jaw pain, muscle ache or muscle spasms.
- *Medical complications.* As with any type of medical procedure, especially one that involves anesthesia, there are risks of medical complications. During ECT, heart rate and blood pressure increase, and in rare cases, that can lead to serious heart problems. If you have heart problems, ECT may be more risky.

ECT video

Tx Guidelines

Pharmacologic Therapy 2

- **Depressed Patient**
 1. In a patient with bipolar depression who is not on a mood-stabilizing agent, options include quetiapine or olanzapine, with carbamazepine and lamotrigine as alternatives. However, most clinicians use antidepressants and an antimanic agent in combination.
 2. If the patient is already optimally treated with a mood-stabilizing agent such as lithium, an option would be lamotrigine.

APA Rx Guidelines, Nov 2010

- **Acute Treatment: Assessment of Treatment Adequacy and Response, Initiation of Treatment:**
 - 4 to 8 weeks of treatment are required
 - ↑ Dose if no S/E till max. dose
 - SWITCH
 - Augment

APA Rx Guidelines, Nov 2010

- **Acute Treatment: Assessment of Treatment Adequacy and Response, Initiation of Treatment:**
 - Psychotherapy:
 - as a first step as monotherapy for mild-to-moderate depression
 - or as part of a combination therapy for more severe MDD.

APA Rx Guidelines, Nov 2010

- **Continuation Phase:**
 - Continuation of medication for 4 to 9 months with the same agent and dose.
 - Psychotherapy focused on depression management is encouraged.

APA Rx Guidelines, Nov 2010

- **Maintenance Phase:**
 - for patients with recurrent and/or chronic depression,
 - or with other risk factors for recurrence (eg, presence of residual symptoms, earlier age of MDD onset, ongoing psychosocial stressors, family history of mood disorders, presence of chronic medical disorder, negative cognitive style, persistent sleep disturbances, and the severity of prior episodes).

APA Rx Guidelines, Nov 2010

- **Maintenance Phase:**

- for patients with recurrent and/or chronic depression
- or with other risk factors for recurrence (eg, presence of residual symptoms, earlier age of MDD onset, ongoing psychosocial stressors, family history of mood disorders, presence of chronic medical disorder, negative cognitive style, persistent sleep disturbances, and the severity of prior episodes).
- The duration of the maintenance phase ??!!

APA Rx Guidelines, Nov 2010

- **Use of Standardized Measurements:**
 - BDI
 - PHQ-9
 - HAMD
 - HAMD-7

 - Massachusetts General Hospital Antidepressant Treatment Resistance Questionnaire (ATRQ)

APA Rx Guidelines, Nov 2010

- **Switching Strategies:**
 - fail adequate dose and duration
 - Switch to: SSRI, SNRI, TCA or bupropion.
 - ? MAOI

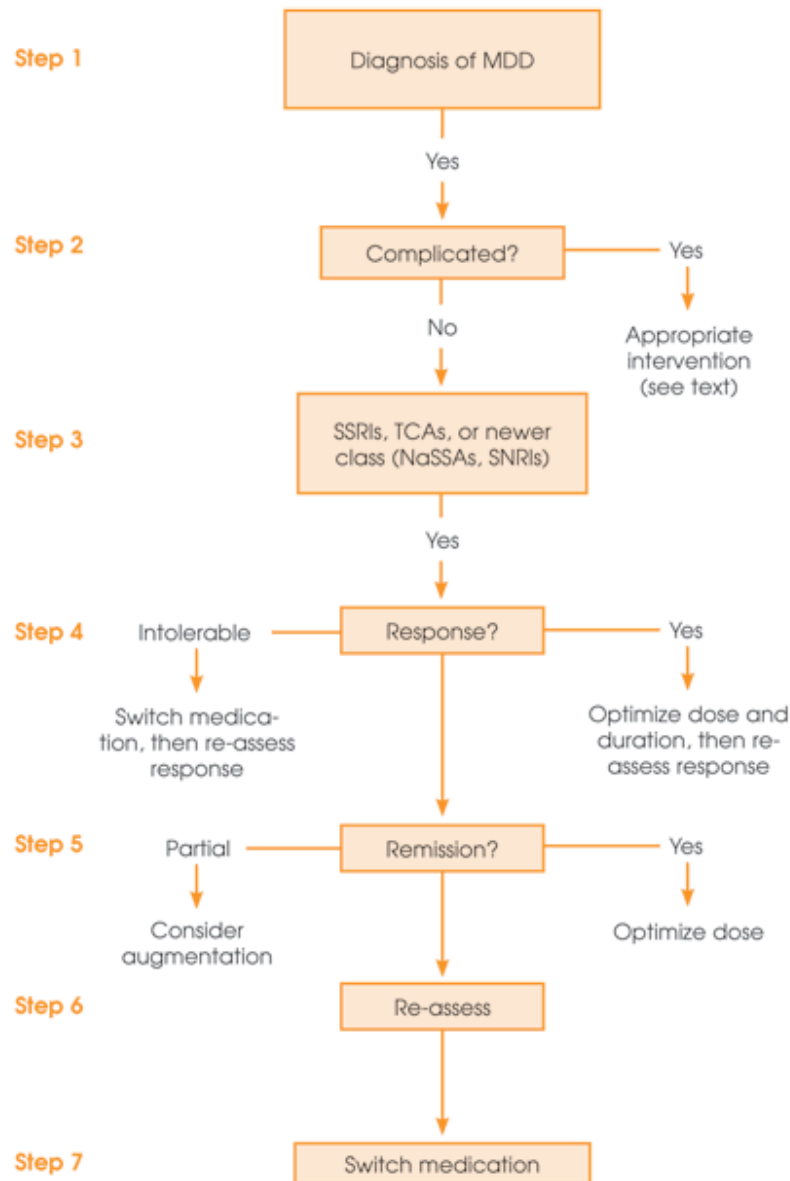
APA Rx Guidelines, Nov 2010

- **Combination:**
 - combine Psychotherapy
- **Augmentation:**
 - another antidepressant
 - atypical antipsychotics: quetiapine extended release, aripiprazole and
 - Olanzapine + fluoxetine
 - off-label : lithium, triiodothyronine, stimulants, and modafinil

APA Rx Guidelines, Nov 2010

- **Somatic Treatments:**
- **ECT:**
 - severe depression and for
 - treatment-resistant depression
 - psychotic depression
- **TMS:** after one medication trial failure
- **VNS:** at least 4 adequate antidepressant trials and/or ECT treatment

Algorithm 1
Algorithm for Pharmacotherapy of Depression



MDD=major depressive disorder; SSRIs=selective serotonin reuptake inhibitors; TCAs=tricyclic antidepressants; NaSSAs=noradrenergic and specific serotonergic antidepressants; SNRIs=serotonin-norepinephrine reuptake inhibitors.

CANMAT Tx Guidelines 2009

- **Canadian Network for Mood and Anxiety Treatments**

Diagnostic Challenges: Differentiating MDD and BD

- Misdiagnosis as MDD is common
- BD more often associated with:
 - Earlier age of onset
 - More recurrences
 - Atypical / mixed depressions
 - Family history of BD or completed suicide
- Mixed states are highly predictive of BD

Criteria for Rating Strength of Evidence

1	Meta-analysis or replicated double-blind (DB), randomized controlled trial (RCT) that includes a placebo condition
2	At least 1 DB-RCT with placebo or active comparison condition
3	Prospective uncontrolled trial with at least 10 or more subjects
4	Anecdotal reports or expert opinion

Treatment Recommendations

First line	Level 1 or Level 2 evidence plus clinical support for efficacy and safety
Second line	Level 3 evidence or higher plus clinical support for efficacy and safety
Third line	Level 4 evidence or higher plus clinical support for efficacy and safety
Not Recommended	Level 1 or Level 2 evidence for lack of efficacy

Recommendations for Pharmacological Treatment of Acute Mania

1st line

- Lithium
- Divalproex
- Olanzapine
- Risperidone
- Quetiapine
- Aripiprazole
- Ziprasidone
- Lithium or divalproex + risperidone
- Lithium or divalproex + quetiapine
- Lithium or divalproex + olanzapine
- Lithium or divalproex + aripiprazole^a

2nd line

- Carbamazepine
- ECT
- Lithium + divalproex
- Asenapinea
- Lithium or divalproex + asenapinea
- Paliperidone monotherapy^a

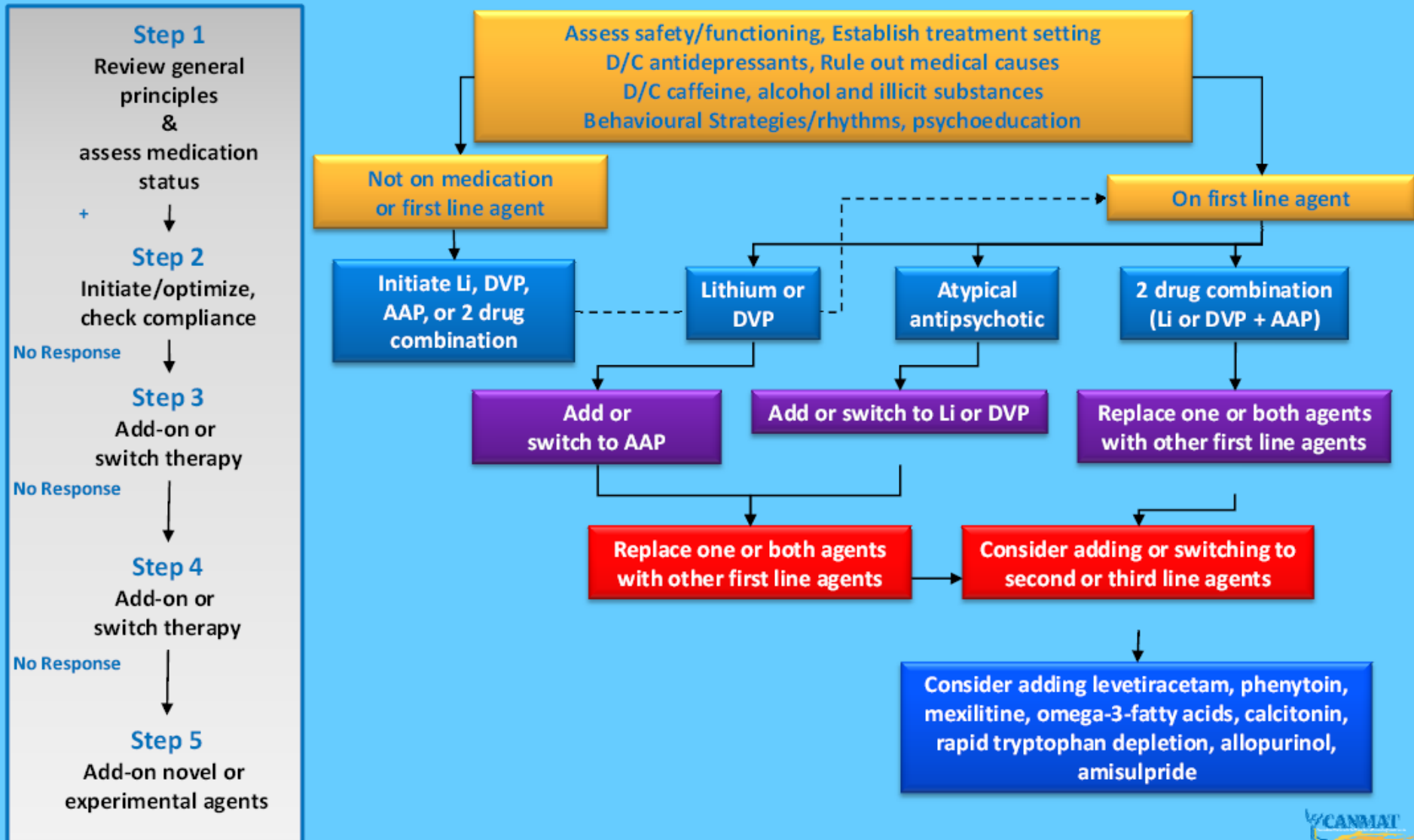
3rd line

- Haloperidol
- Chlorpromazine
- Lithium or divalproex + haloperidol
- Lithium + carbamazepine
- Clozapine
- Oxcarbazepinea
- Tamoxifena

Not Recommended

Monotherapy with gabapentin, topiramate, lamotrigine, verapamil, tiagabine, risperidone + carbamazepine, olanzapine + carbamazepine^a

Treatment Algorithm for Acute Bipolar Mania



Recommendations for Pharmacological Treatment of Acute Bipolar Depression^a

1st line

- Lithium
- Lamotrigine
- Quetiapine
- Lithium or divalproex + SSRI
- Olanzapine + SSRI
- Lithium + divalproex
- Lithium or divalproex + bupropion

2nd line

- Quetiapine + SSRI
- Divalproex^b
- Lithium or divalproex + lamotrigine
- Adjunctive modafinil^b

3rd line

- Carbamazepine
- Olanzapine
- Lithium + carbamazepine
- Lithium + pramipexole
- Lithium or divalproex + venlafaxine
- Lithium + MAOI
- ECT
- Lithium or divalproex or AAP + TCA
- Lithium or divalproex or carbamazepine + SSRI + lamotrigine
- Adjunctive EPA
- Adjunctive riluzole
- Adjunctive topiramate

Not Recommended

- Gabapentin monotherapy, aripiprazole monotherapy^b

^aThe management of a bipolar depressive episode with antidepressants remains complex. The clinician must balance the desired effect of remission with the undesired effect of switching.

^bNEW. AAP = atypical antipsychotic; EPA = eicosapentaenoic acid; ECT = electroconvulsive therapy; MAOI = monoamine oxidase inhibitor; SSRI = selective serotonin reuptake inhibitor; TCA = tricyclic antidepressant.

Recommendations for Maintenance Pharmacotherapy of Bipolar Disorder

1st line

- Lithium
- Lamotrigine monotherapy (limited efficacy in preventing mania)
- Divalproex
- Olanzapine
- Quetiapine
- Lithium or divalproex+quetiapine^a
- Risperidone LAI^a
- Adjunctive risperidone LAI,^a
- Aripiprazole (mainly for preventing mania)^a
- Adjunctive ziprasidone^a

2nd line

- Carbamazepine
- Lithium + divalproex
- Lithium + carbamazepine
- Lithium or divalproex + olanzapine
- Lithium + risperidone
- Lithium + lamotrigine
- Olanzapine + fluoxetine

3rd line

- Adjunctive phenytoin
- Adjunctive clozapine
- Adjunctive ECT
- Adjunctive topiramate
- Adjunctive omega-3-fatty acids
- Adjunctive oxcarbazepine, or
- Adjunctive gabapentin

Not Recommend

Adjunctive flupenthixol, monotherapy with gabapentin, topiramate or antidepressants

ECT=electroconvulsive therapy, LAI=long acting injection, SSRI=selective serotonin reuptake inhibitor.

^aNEW

Recommendations for Pharmacological Treatment of Acute Bipolar II Depression

1st line

- Quetiapine^a

^a NEW

2nd line

- Lithium
- Lamotrigine
- Divalproex^a
- Lithium or divalproex + antidepressants
- Lithium + divalproex
- Atypical antipsychotics + antidepressants

3rd line

- Antidepressant monotherapy (particularly for those with infrequent hypomanias)
- Switch to alternate antidepressant
- Ziprasidone^a

Not Recommend

See CANMAT guidelines text on antidepressants for recommendations regarding antidepressant monotherapy. The risk benefit ratio for antidepressant use in BDII is still an unresolved issue.

Recommendations for Maintenance Treatment of Bipolar II Disorder

1st line

- Lithium
- Lamotrigine

^a NEW

2nd line

- Divalproex^a
- Lithium or divalproex or atypical antipsychotic+ antidepressants
- Combination of two of: lithium, lamotrigine, or atypical antipsychotic

3rd line

- Carbamazapine
- Atypical antipsychotic
- ECT

Not Recommend
Gabapentin.

Emergency Management of Agitation

- First-line therapies
 - Risperidone (level 2)
 - Olanzapine (level 2)
 - Quetiapine (level 3)
- For patients who refuse oral atypical antipsychotics:
 - IM olanzapine or ziprasidone (level 2)
 - Typical antipsychotic IM + benzodiazepine (level 3)

*Whenever possible, oral therapy should be offered first, as evidence suggests that oral agents can be as effective as intramuscular agents

Emergency Management of Agitation

IM aripiprazole*

- First choice in acute agitation (Level 2)
- As effective as IM lorazepam and more effective than IM placebo in patients with BDI (manic or mixed episodes)
- Acts within 45-60 minutes

*Injectable agents should be offered only to patients who refuse oral treatment options

Emergency Management of Agitation

IM olanzapine*

- New evidence supports IM olanzapine (level 2)
- Significantly reduced agitation / induced mild calmness in severely agitated patients with acute mania within 2 hours

*Injectable agents should be offered only to patients who refuse oral treatment options

Safety & Tolerability of Pharmacotherapy

Systematic reviews and meta-analyses confirm most common side effects of BD treatments

Side effect	Therapies
EPS	Risperidone, aripiprazole
Tremor / movement disorders	Haloperidol
Weight gain	Olanzapine, quetiapine, risperidone, lithium + divalproex
Somnolence / sedation	All AAPs
Dry mouth	Quetiapine
Prolactin	Risperidone

Metabolic Syndrome & Diabetes

- New evidence supports previous reports of high rates of metabolic syndrome in BD
 - 25-50% of patients meet criteria for metabolic syndrome
 - Significantly higher in patients receiving antipsychotics
- Data suggest increased risk of diabetes with antipsychotic therapy
 - Relative risks of individual agents poorly defined

Prognosis

- Depends on:
 - Dx
 - Severity
 - Duration
 - Support
 - Compliance

THANK YOU