APPROACH TO PSYCHOSIS IN PRIMARY CARE

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Objectives

• Learn effective questioning to evaluate psychosis.

• Be familiar with the complete differential diagnosis of psychotic disorders.

• Learn about current psychopharmacologic treatments of psychotic disorders.
PSYCHOSIS

• Delusion: Fixed, false idea; not consistent with one’s culture

• Hallucination: Perceptual experiences without any external stimuli

• N.B. Illusions: Misinterpretation of stimulus

• Disorganized thinking, or behaviour
ASKING ABOUT PSYCHOSIS

• Do you have unusual experiences, such as hearing voices other people cannot; or seeing things other people cannot?
• Do you have unusual thoughts; such as feeling you have special powers no one else on earth has; or do you feel there is a plot out there, by people you don’t even know, who want to harm you?
ASKING ABOUT PSYCHOSIS

• Do you ever feel the radio or TV has special messages just for you? (ideas of reference)
• Do you feel your thoughts are “broadcast” so that anyone around you can know what you’re thinking. Do you feel thoughts can be inserted or taken out of your head?
ASKING ABOUT PSYCHOSIS

• Do you feel your thoughts, actions, or feelings are controlled by some external power?
• Do you feel there is something very unusually wrong with your body (somatic delusion)?
GENTLE QUESTIONING:

• “I think you may be misinterpreting things,”
• “I think your thoughts may be getting away from you.”
  “What do you think?”

N.B. Delusion is a fixed false idea not consistent with one’s cultural beliefs. Therefore, see if thought is fixed.
• Predicting the future, reading people’s minds, may not be delusional.
• May be schizotypal personality
• Religious thought often gets tricky. Compare to what was happening in the past
STRATEGY:

• Try to ally with patient’s complaints:
  • e.g. “This will help you sleep.”
  • “Feel less agitated” etc.

When trying to persuade them to take antipsychotic medication.
STRATEGY

• You can reality test for the patient:
  • “I know this is real for you, but I see things somewhat differently...”
ENSURE SAFETY

• Command hallucinations
• Suicidal ideation
• Homicidal ideation
• Caring for self - food, shelter

Note: Can make a contract with a psychotic person, but trickier
R/O ORGANIC

1. Non-auditory, e.g., Visual Hallucinations
2. Clouded Sensorium
3. Older age at first onset
D  Drugs
I  Infection
M  Metabolic
E  Endocrine
V  Vascular
E  Epilepsy
T  Tumour/trauma
S  Syphilis
DIFFERENTIAL:

• Time Course

  Brief Psychotic Reaction:  less than 1 month
  Schizophreniform Psychosis: 1 – 6 months
# Differential of Psychosis

<table>
<thead>
<tr>
<th></th>
<th>Hallucination</th>
<th>Bizarre vs Non Bizarre</th>
<th>Downward Drift</th>
<th>Affect at time of Psychosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>+/-</td>
<td>NB/B</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Schizoaffective</td>
<td>+/-</td>
<td>NB/B</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Affective Disorder</td>
<td>+/-</td>
<td>NB/B</td>
<td>-</td>
<td>+</td>
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<tr>
<td>Delusional Disorder</td>
<td>-</td>
<td>NB</td>
<td>-</td>
<td>-</td>
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</table>
SCHIZOAFFECTIVE VS. BIPOLAR
POSITIVE SYMPTOMS:

Dopaminergic Tracts
I. Mesolimbic
II. Nigro-Striatal
III. Hypothalamic-Pituitary
TARDIVE DYSKINESIA
“IATROGENIC PARKINSON’S”
1. Parkinsonism
2. Akathesia
3. Dystonias
“IATROGENIC HUNTINGTON’S”

- 15-20% of people on neuroleptics
- Cumulative dosage
- Older, women, on large dose, x years
- Sometimes idiosyncratic. Can be just a brief number of months.
DRUG TREATMENT

ATYPICAL NEUROLEPTICS

• Considered treatment of choice:
  • Olanzapine
  • Risperidone
  • Quetiapine
  • Clozapine

• No psychosis is considered treatment resistant until Clozapine is tried.
ATYPICAL NEUROLEPTICS

ADVANTAGES:
• Better s/e profile
  • less EPS
  • less TD
• Possible better response with respect to negative symptoms.
• CUTLASS1 study argues against this.
• Equal efficacy with respect to positive symptoms
• Liver cleared - do LFT’s prior. If history of liver problems, do LFT’s q 6-12 months
RISPERIDONE (RISPERDAL)

• Blocks $D_2/5HT_2$
  also alpha adrenergic
• Peak Plasma: 1-2 hours
• Half life: 20-24 hours
• Liver metabolized
RISPERIDONE - (RISPERDAL)

EPS increased

May increase prolactin – can cause amenorrhea, galactorrhea, sexual problems
RISPERIDONE

Dosage:

Start 0.5 mg. BID

Range:

2-4 mg OD

Few studies, re pregnancy
OLANZAPINE (ZYPREXA)

BLOCKS:  
D₂/5HT₂  
Also D₁, D₃, D₄  
Muscarinic  
Alpha adrenergic  
Histamine  

Peak plasma 5-8 hrs after intake  
1/2 life 21-54 hours  
metabolized by liver - P450-2D6  
Little P450 interactions
OLANZAPINE - (ZYPREXA)

- somnolence
- orthostatic hypotension, dizziness
- ↑ hepatic transaminase (ALT, AST, GGT)
- weight gain
- no increase in prolactin
- few studies re: pregnancy/lactation
OLANZAPINE

Dosage:

Start: 5 mg PO OD
Range: 10-20 mg OD

Geriatric/hepatic impairment:
Start 2.5 mg PO OD
QUETIAPINE (SEROQUEL)

- Blocks: 5HT$_2$/D$_2$ Receptors
  also D$_1$
  H$_1$
  Alpha Adrenergic
- Peak plasma: 2 hours after dosage
- Half life: 6-7 hours
- Metabolized by the liver - CYP 3A4
QUETIAPINE - (SEROQUEL)

Somnolence
Cataracts - in animals
   slit lamp examination recommended

hypothyroid
weight gain less
no increased prolactin
few studies safety in pregnancy
# QUETIAPINE

**DOSAGE:**

<table>
<thead>
<tr>
<th>Start: 50 mg OD</th>
<th>DAY</th>
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<tbody>
<tr>
<td>100 mg OD</td>
<td>3-4</td>
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<tr>
<td>200 mg OD</td>
<td>5-6</td>
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<tr>
<td>300 mg OD</td>
<td>7 &amp; beyond</td>
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</table>

Treatment range: 300-600 mg/day
sometimes needs 600-800 mg/day

New Form: Quetiapine XR 300 mg. Tabs-- Can start 300 mg. OD on day 1. Can increase to 300 mg. BID on Day 2.
CLOZAPINE (CLOZARIL)

- Blocks $D_1$ and $D_4$ and $5HT_2$. Less $D_2$
- Peak levels 2-5 hours (1-6 hours)
- 1/2 life 12 hours (6-30 hours)

- Liver metabolized - mainly P450 1A2, somewhat P450 2D6
CLOZAPINE

Agranulocytosis - Follow WBC, Neutrophils
  Weekly x 26 weeks, then biweekly indefinitely / idiosyncratic effect

Seizures - dosage linked esp >600 mg/day
  Drowsiness
  Hypotension, dizziness, tachycardia
  Hypersalivation
  Weight gain
  Fever
  Little tardive dyskinesia
  No increase in prolactin
CLOZAPINE

- Do not use with Carbamazepine/depot Neuroleptics
- Pregnancy/Lactation not established
- Due to agranulocytosis and blood work, less used as first line in primary care
CLOZAPINE

Dosage:

12.5 mg OD          Day 1
25 mg OD            Day 2
25 BID              Day 3

• then  by 25-50 mg increments daily
• target dose 300-450 mg/day by 2 weeks
• dosage range 300-600 mg/day in divided doses
• maximum 900 mg/day
Ziprasidone

- Equal Efficacy
- Less EPS and TD
- Less Metabolic
- BUT……
- Prolonged QT. To be avoided with hx of prolonged QT, hx of cardiac arrhythmias, post MI, CHF, avoid with other drugs that prolong QT
- Dosage: 20 or 40 mg. PO BID up to 80 mg. PO BID
Aripiprazole

- Equal Efficacy
- Less EPS and TD
- Less Metabolic Effects
- No QT Prolongation
- If this all holds true, we will all be using this a lot!!
- Dosage: 10-15 mg. Po OD. Maximum is 30 mg. PO OD
Metabolic Syndrome

• Increased glucose: Diabetes Type II
• Increased cholesterol
• Increased tryglycerides
• It is possible that rate of Diabetes Type II may be linked to weight gain but not clear.
• Check fasting blood sugar every four months, along with cholesterol and triglycerides.
Weight Gain

Olanzapine and Clozapine more than Risperidone and Seroquel
# TRADITIONAL NEUROLEPTICS

<table>
<thead>
<tr>
<th></th>
<th>Alpha Blocking</th>
<th>Antihistamine</th>
<th>Anticholinergic</th>
<th>EPS inducing</th>
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<tbody>
<tr>
<td>CPZ</td>
<td>100</td>
<td>H</td>
<td>H</td>
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<tr>
<td>Mellaril</td>
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<td>Perphenazine</td>
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<tr>
<td>Stelazine</td>
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<tr>
<td>Loxapine</td>
<td>10-15</td>
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<tr>
<td>Haldol</td>
<td>2</td>
<td>L</td>
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Usual daily antipsychotic dosage: CPZ 300-500 mg
TRADITIONAL NEUROLEPTICS

- Haldol/Stelazine safer re: pregnancy
- May increase prolactin
Use of Neuroleptics I

- Anti-psychotic
- Anti-manic (After Mood Stabilizer, Benzos)
- For Prophylaxis in schizophrenia and schizoaffective
- Olanzapine approved for Bipolar prophylaxis
Use of Neuroleptics II

• For treatment resistant OCD patients
• For agitation in demented patients (low dose)
• For nausea: often in cancer patients ?after Gravol
• Tourette’s Syndrome
• Sometimes in Borderline Personality
• Possibly in bipolar depression
• For augmentation in depression
Use of Neuroleptics III

- Do not use in general for nighttime sedation, or as anxiolytic.
- Benzos/hypnotics preferred, because no risk of T.D.
Three Pronged Effect of Neuroleptics

1. Motor Agitation - minutes to hours
2. Perceptual - three to seven days
3. Disordered Thoughts - three to six weeks
NMS

- can happen in 1-2% of people on neuroleptics
- has 15% mortality
NMS - Neuroleptic Malignant Malignant Syndrome

Temperature

Sympathetic lability (BP, Pulse)
Confusion
Rigidity
NMS

- Usually associated with:
  - Starting Neuroleptic
  - Increasing Neuroleptic
  - Changing Neuroleptic

But can be anytime
No neuroleptic better than another
NMS

1. ↑ CPK

2. Myoglobinuria

3. ↑ WBC, ↓ FE
NMS

Treatment:

D/C Neuroleptic

Bromocriptine - no advantage
Dantrolene - no advantage
Use Benzos for agitation, sedation
NMS

As per P. Rosebush Studies

• After two weeks symptom free, can rechallenge with another neuroleptic. Switch to a different class.

• If you don’t wait two weeks, NMS may reappear
NMS

• NB:

If FUO and on neuroleptic: d/c Neuroleptic use Benzos for agitation
I.M. NEUROLEPTIC

• e.g.  
  Modecate (Fluphenazine Decanoate)  q 2-4 wks
  Moditen  (Fluphenazine Enanthate)
  Haldol LA  (Haloperidol Decanoate)
  Risperidal Consta  (Risperidone)  25 mg q 2 wks

Close if compliance an issue e.g. paranoid states
But - stuck if problems with side effects.
• For EPS, use Anticholinergics

Benzotropine (Cogentin)  2-6 mg OD
Procyclidine (Kemadrin)  2.5 mg -5 mg
                    BID - TID

NB: I.M. Benztropine 2 mg for acute dystonic reaction e.g. oculogyric crisis
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