

# 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.

# DELUSIONS

- 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

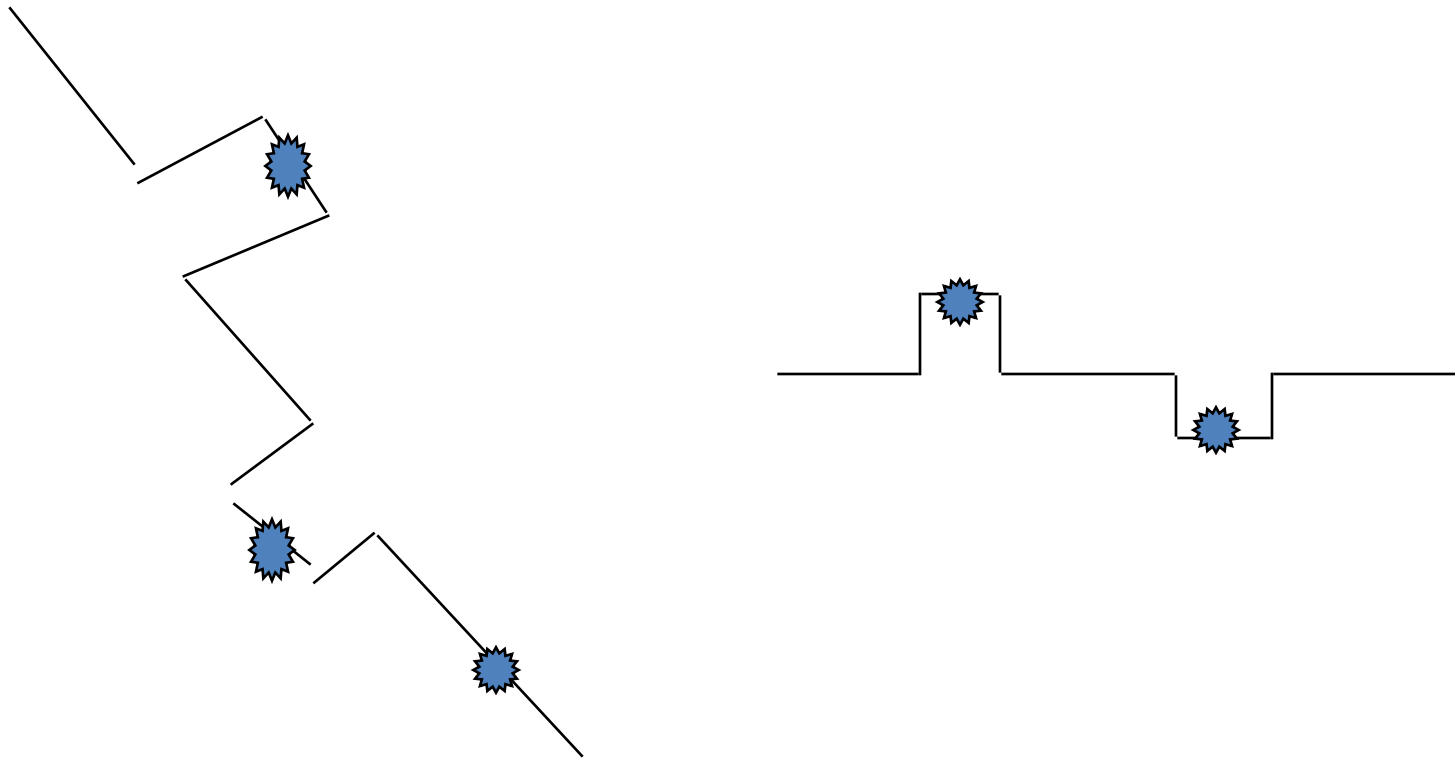
Brief Psychotic Reaction: less than 1 month

Schizophreniform Psychosis: 1 – 6 months

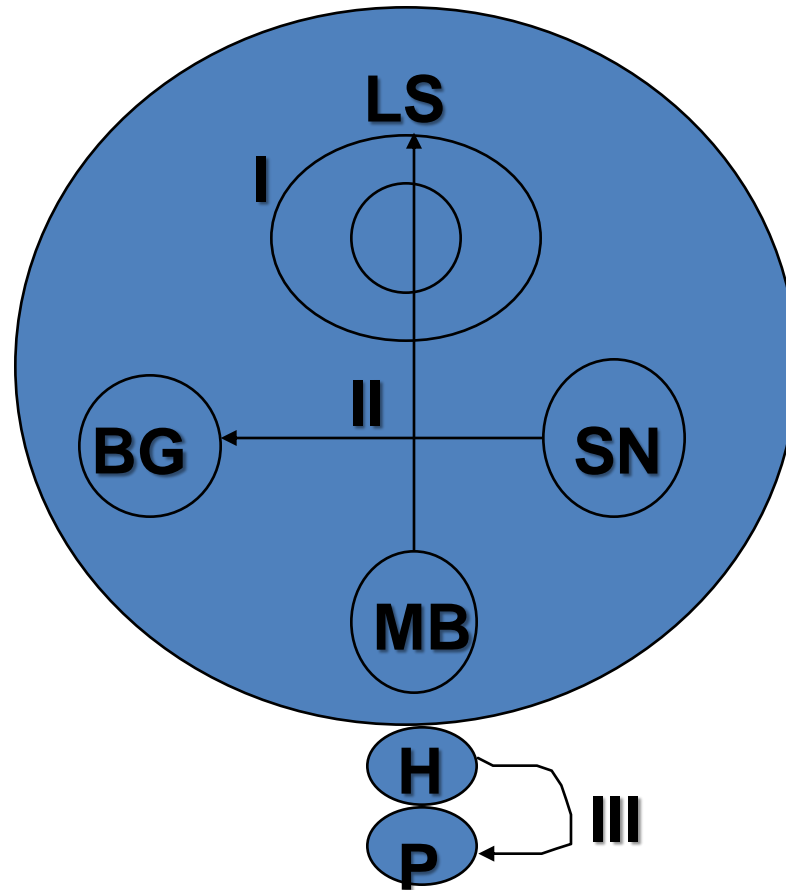
# DIFFERENTIAL OF PSYCHOSIS

	Hallucination	Bizarre vs Non Bizarre	Downward Drift	Affect at time of Psychosis
Schizophrenia	+/-	NB/B	+	-
Schizoaffective	+/-	NB/B	+	+
Affective Disorder	+/-	NB/B	-	+
Delusional Disorder	-	NB	-	-

# SCHIZOAFFECTIVE VS. BIPOLAR



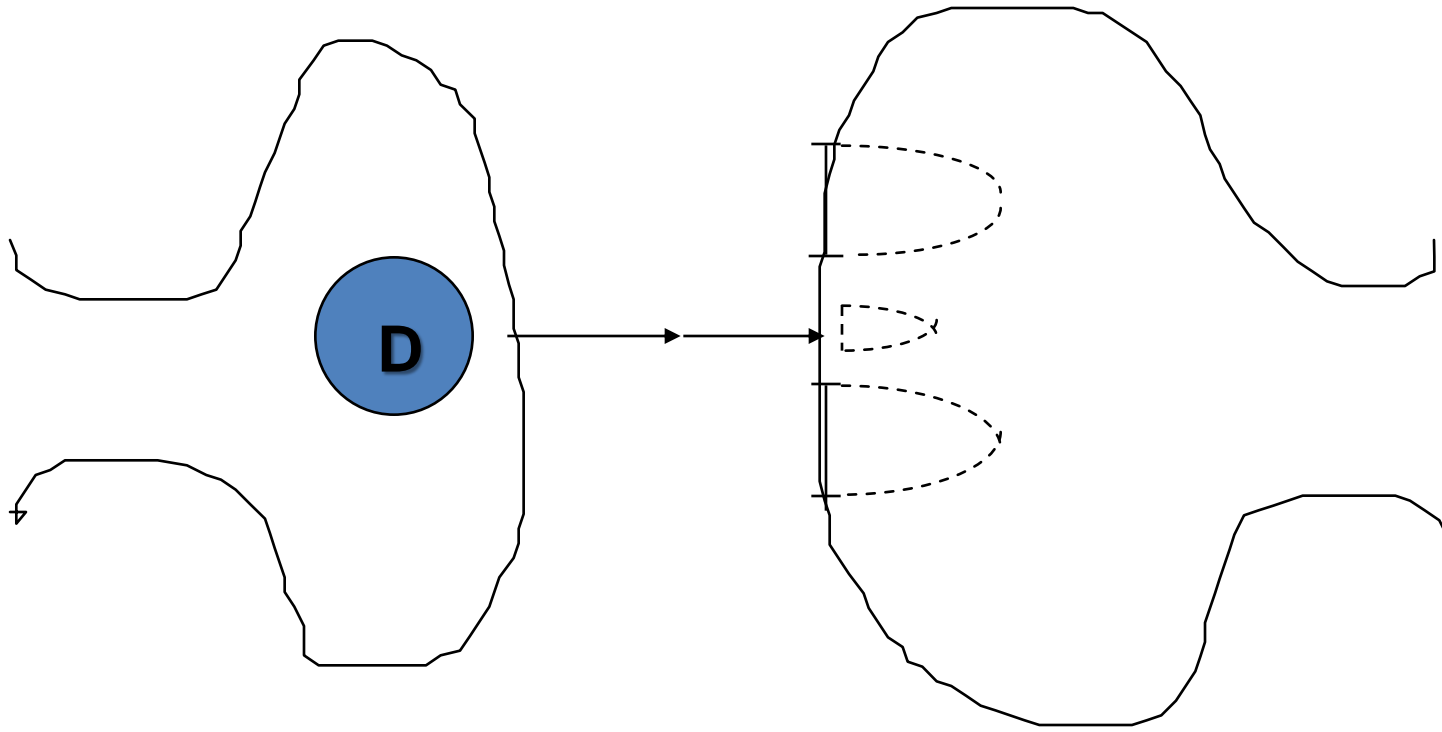
# POSITIVE SYMPTOMS:



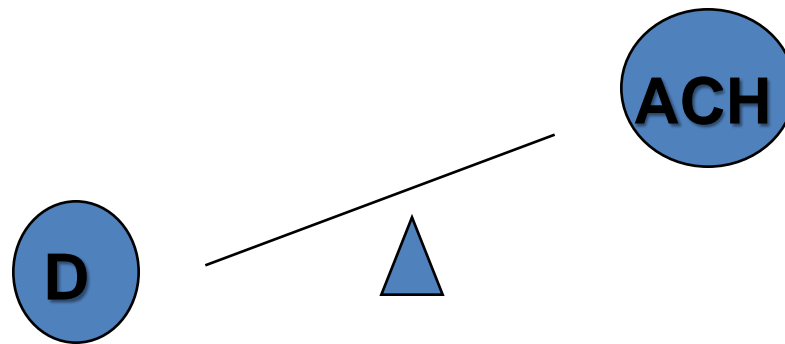
Dopaminergic  
Tracts

- I. Mesolimbic
- II. Nigro-Striatal
- III. Hypothalamic-Pituitary

# TARDIVE DYSKINESIA



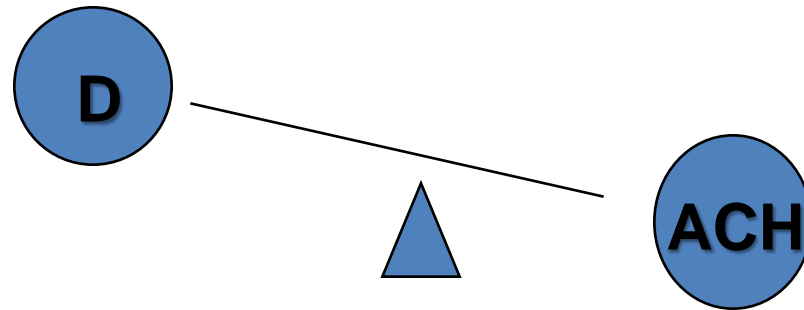
# EPS



## “IATROGENIC PARKINSON’S”

1. Parkinsonism
2. Akathesia
3. Dystonias

# TD



## “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.
  - Jones, Peter, et al. Archives of General Psychiatry, Vol.63, October, 2006, pp. 1079-1987
- 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:                     $D_2/5HT_2$   
                              Also  $D_1$ ,  $D_3$ ,  $D_4$   
                              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<sub>2</sub>/D<sub>2</sub> Receptors  
also D<sub>1</sub>  
H<sub>1</sub>  
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:

## DAY

Start: 50 mg OD

1-2

100 mg OD

3-4

200 mg OD

5-6

300 mg OD

7 & beyond

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 triglycerides
- 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

		Alpha			
		Blocking	Antihistamine	Anticholinergic	EPS inducing
CPZ	100	H	H	H	L
Mellaril	100				
Perphenazine	8	M	M	M	M
Stelazine	5				
Loxapine	10-15				
Haldol	2	L	L	L	H

Usual daily antipsychotic dosage: CPZ 300-500 mg

# TRADITIONAL NEUROLEPTICS

- Haldol/Stelazine safer re: pregnancy
- May increase prolactin

# Use of Neuroleptics I

- Anti-psychotic
  - Organic
  - Psychiatric
- 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 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.		<u>Given</u>
<u>Modecate</u>	(Fluphenazine Decanoate)	q 2-4 wks
<u>Moditen</u>	(Fluphenazine Enanthate)	
<u>Haldol LA</u>	(Haloperidol Decanoate)	
<u>Risperidal Consta</u>	(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. Benzotropine 2 mg for acute dystonic reaction e.g. oculogyric crisis

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