SCHIZOPHRENIA

Symptoms
Types
Antipsychotics
- Typical
- Atypical

Side-effects
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Symptoms of Schizophrenia

- Peak onset = early 20s
- Diagnostic symptoms are known as 'first rank symptoms':
  - 3rd person auditory hallucinations and/or running commentaries
  - Thought withdrawal/insertion/broadcast
  - Primary delusions (i.e.: delusions which arise out of nothing)
  - Delusional perceptions
  - Somatic passivity and feelings (i.e.: the person thinks that others are controlling them)
- Other symptoms include: behavioural disturbances, blunting of mood, secondary delusions (these are normally persecutory) etc
- Symptoms are often grouped into 'positive' (adding to the personality such as delusions, hallucinations, disordered speech r thinking etc), and 'negative' (taking away from the personality such as poverty of speech, asociality, apathy etc)
- Due to altered levels of dopamine with some genetic and environmental basis
- More common in lower socioeconomic groups
- Suicide a significant risk

Types of Schizophrenia

- Schizophrenia can be divided into types:
  - Paranoid
  - Disorganised (incoherent speech/thought but may not have delusions)
  - Catatonic (withdrawn, mute, unusual body positioning)
  - Residual (not experience delusions/hallucinations but is very apathetic)
  - Schizoaffective disorder: clear cut affective and schizophrenic symptoms co-exist within the same episode
  - Hebephrenic: disorganised thoughts and behaviour with inappropriate emotions, fleeting delusions/hallucinations
  - Undifferentiated: doesn't really fit into any particular type

Neuroleptics (Antipsychotics)

- Block D1 and D2 dopamine receptors
- Most effective in dealing with the acute, positive symptoms, and less effective in the chronic, negative symptoms

Typical ('First Generation') Antipsychotics

- Block D2 receptors
- E.g.: haloperidol, flupentixol
- Phenothiazines:
  - More sedating and less frequently used nowadays (were the first developed)
  - E.g.: Chlorpromazine
- Butyrophenones:
  - E.g.: haloperidol
  - Powerful for the treatment of acute schizophrenia and mania
  - More likely to cause dystonias and extrapyramidal effects
  - Less sedating than atypical antipsychotics

Atypical (second generation) Antipsychotics

- Serotonin Dopamine Antagonists (SDAs)
- Fewer side-effects than their predecessors
- Recommended first line
- E.g.:
  - Olanzapine(but weight gain and increased DM risk are problems)
  - Risperidone (but risperidone and hyperprolactinaemia are problems)
    Clozapine (last resort medication, but problems such as agranulocytosis, weight gain, sialorrhoea, DM and GI hypomobility are problems)

Side-effects

- The D2 blocking tends to produce 'extrapyramidal effects':
  - Pseudoparkinsonism (shuffling gate, mask facies, drooling, tremor) = give antihistamines and anticholinergics (e.g.: Benztropine)
  - Acute dystonia (jaw clenching, eye deviations, stiff and rigid muscles, spasms etc) = give an anticholinergic (Benztropine)
  - Akathesia/motor restlessness (can't sit still, pacing etc) = give benzodiazepines
  - Tardive dyskinesia (involuntary orofacial movements such as chewing, grimacing, sticking out tongue, lip puckering etc) = try to switch to another types of antipsychotic
- Clozapine may produce Agranulocytosis:
  - Decrease in white blood cells (particularly neutrophils)
  - Increases the person's infection susceptibility
- Neuroleptic Malignant Syndrome:
  - Infrequent but dangerous side-effect mostly seen in patients on haloperidol
  - Begins fairly soon after treatment initiation
  - Sx: hyperthermia, muscle rigidity, autonomic instability (tachycardia, palor, blood pressure fluctuations), fluctuating consciousness, PEs, renal failure
  - Bloods will show high creatinine kinase and abnormal LFTs
- Pregnancy usage:
  - No one is really sure
  - Haloperidol and other Butyrophenones are probably better than Phenothiazines
- Hyperprolactinaemia:
  - Due to the dopamine antagonising action of antipsychotics, prolactin levels are increased (dopamine normally suppresses prolactin)
  - Symptoms: amenorrhea, infertility, sexual dysfunction, weight gain and galactorrhea
- They also block adrenergic and muscarinic receptors, causing unpleasant side-effects such as dry mouth, hypotension, dystonia etc

Legal Issues

- Mental Capacity Assessment
  - Capacity assumed unless there is evidence to the contrary
  - In absence of capacity, doctors should act in the patient's best interest and provide the least restrictive management
  - An independent patient advocate must be involved
  - Impaired capacity is when there is an inability to:
    - Understand relevant information
    - Retain information for a sufficient amount of time to enable them to make a decision
    - Use/weigh up the information that is given to them
    - Communicate a decision made
- Sectioning
  - Section 2 = assessment (up to 28 days)
  - Section 3 = treatment (up to 6 months)
  - Section 4 = emergency (up to 72 hours)
  - Section 5 = 'holding power' to stop a voluntary/informal patient leaving the hospital (up to 72 hours)
  - Community Treatment Order = supervised community treatment upon discharge