These are some notes that were taken during the rounds and lectures, hope they will benefit in the exam

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GOODLUCK

# **Anti Psychotics**

Q.1: Which drug is used in refractory schizophrenia?

A.l: Clozapine "atypical"

Q.2: What is the most important S.E of clozapine?

A.2: Agranulocytosis "that's why we should check the WBC on a weekly basis and if the WBC drops below 3000 stop the drug immediately.

- Q.3: What other S.Es clozapine cause?!
- A.3: 1) Weight gain.
  - 2) Decrease seizure threshold.
  - 3) Hyper salivation.
  - 4) Myocarditis.
- Q.4: Which anti-psychotics can be given in an injectable form for a non-compliant patient?
- A.4: 1) Haloperidol <u>Decanoate</u>. IM (typical)
  - 2) Fluphenazine <u>Decanoate.</u> IM (typical)
  - 3) Resperidone (atypical)
- Q.5: What are the S.Es of typical anti-psychotics?
- A.5: 1) Extrapyramidal:
  - a) Acute dystonia -----treated by-------> Benzatropine (anticholinergic).
  - b) Akathesia ·····treated by····· Beta blockers.
  - c) Parkinsonism (mask face, rigidity, tremor).
- - 2) Hyperprolactinemia (ammenorhea, gynecomastia, impotence and decreased libido).
  - 3) Neuro malignant syndrome 'Emergency'

Can happen anytime after starting treatment.

Give: Dantrolene (muscle relaxant).

Bromocriptine (dopamine agonist).

Q.6: What are Olanzapine "atypical" S.Es?

- A.6: 1) Weight gain.
  - 2) Sedation.
  - 3) Sexual dysfunction.
- there are other S.E's as dyslipidemia and glucose intolerance; that's why it contributes to metabolic syndrome (diabetes type II etc... so it is preferable to check for fasting glucose test).

Note: the only two atypical drugs that do not cause increase in weight are Ziprasidone and Aripiprazole; that's why we can use them in obese patients.

# Anti Depressants

- almost all anti-depressant are equal in effectiveness.
- \* TCAs: (Imipramine and Amitryptaline)
  - many side effects.
  - contraindicated in glaucoma patient since they increase intraocular pressure.
- lethal in overdose (look for suicidal thoughts or attempts) "anti-dote: sodium bicarbonate IV".
  - S.Es: 1) Weight gain.
    - 2) Sedation.
    - 3) Dry mouth.
    - 4) Blurred vision.
    - 5) Constipation, etc....
- Imipramine can be used in children with nocturnal enuresis.
- Amitryptaline: due to high sedative effect can be used in agitated patients or any neuropathic pain.
- Avoid drug in patients with pre-existing cardiac conduction problem.
- \* SSRIs: (memorize all 6 drugs).
  - Less side effects.
  - Safer than TCA's.
  - Also used in OCD, Anorexia nervosa, premenstrual dysphoric disorder.
  - S.Es: 1) Headache and dizziness.
    - 2) Akathesia.
    - 3) GI upset (common).
    - 4) Insomnia.
    - 5) Sexual dysfunction (late).

- 6) Anorexia, Weight loss.
- When switching from SSRIs to MAOIs; leave a gap of two weeks to avoid serotonin syndrome, in fluoxatine leave a gap of three to six weeks.

#### \* MAOIs:

- Very effective in refractory depression and refractory panic disorder.
- Becareful with tyramine rich food (hypertensive crisis).
- Becareful with SSRI (serotonin syndrome).
- \* Atypical anti-depressants:
  - SNRI -----> Venlafaxine
    - \* effective in refractory depression.
    - \* care must be taken in hypertensive patients (increase blood pressure).
- NRIs ----- Bupropion
  - \* used in aiding smoking cessation.
  - \* also used in ADHD as well as seasonal affective disorder.
  - \* lack of sexual S.E.
- NASA ----- Mirtazapine
  - \* used in refractory MDD especially patients that need to gain weight.
  - \* No sexual S.E.

Q: Patient with sexual dysfunction and you want to give him anti-depressant, what is the drug of choice?

A: Bupropion or Mirtazapine.

## **Mood Stabilizers**

- used to treat acute mania and prevent relapses of manic episodes.
- Anti-psychotics can be used as adjunct in the treatment of acute manic episodes if the patient showed psychotic features.
- \* Lithium Carbonate:
- drug of choice for treatment of acute mania and as a prophylaxis for both manic and depressive episodes in bipolar disorder.
  - narrow therapeutic index 0.7-1.2

1.5 (toxic)

2 (lethal).

- S.Es: 1) Hypothyroidism (monitor TSH regularly).
  - 2) Tremor.
  - 3) Nephrogenic Diabetes Insipidus (polyurea, polydipsia).
  - 4) Teratogenic (becareful if pregnant).
  - 5) Gastric ulcer.
- \* Carbamezapine (tegretol):
  - anti-convulsant.
  - used in treating mixed episodes and rapid cycling bipolar disorder.
  - also used in trigeminal neuralgia.
  - S.Es: 1) Slurred speech.
    - 2) Leukopenia.
    - 3) Ataxia (in high doses).
    - 4) Drowsiness.
    - 5) Skin rash (grey complexion).
    - 6) Teratogenic.
- \* Valproic Acid:
  - anti-convulsant.
  - not given in children.
  - S.Es: 1) Hepatotoxic.
    - 2) Thrombocytopenia.
    - 3) Hemorrhagic pancreatitis.
  - monitor LFT and CBC.

# **Anxiolytics**

- Used in treatment of anxiety and panic disorders.
- Depress the CNS causing a sedative effect.
- \* Benzodiazepines:
  - first line treatment of anxiety.
  - used for a short duration because of dependence and tolerance.
  - 3 groups: 1) long acting (e.g diazepam "valium").
    - 2) intermediate (e.g alprazolam "xanax").
    - 3) short acting (e.g oxazepam).
  - benzodiazepines are used in patient with insomnia.
  - advantage: safer at high doses than barbiturates.
  - lethal if mixed with alcohol (respiratory depression).

- S.E: cause paradoxical effect in elderly patients (agitation, violence, irritability) that's why we give halidol with valium.
  - contra-indicated in patient with neuromuscular problem (e.g myasthenia gravis).
  - anti-dote: Flumazenide.

### \* Buspirone:

- used in GAD "Generalised Anxiety Disorder".
- two to four weeks to have effect (slow action).
- lower potential for dependence and tolerance.
- can be given in alcoholics.

### \* Beta Blockers:

- becareful in asthmatic patients.
- treat autonomic effect of panic attacks or performance anxiety such as palpitation, sweating, etc...
  - also used in treatment of akathesia.
- \* Zolpidem.
- \* SNRIs (Venlafaxine).
- \* SSRIs.
- \* TCAs.

Wish you the best of luck ☺ Done by: Hani khatib