Use of non-psychotropic medicines in the clinical practice of psychiatry



"Each capsule contains your medication, plus a treatment for each of its side effects." Each capsule contains your medications plus a treatment for each of its side effects Non-Psychotropic Medicines

- Propranolol, Ivabradine, Primidone
- Glycopyrrolate, Atropine, Clonidine, Amitriptyline, Mirtazapine
- Tolvaptan, Fludrocortisone
- Bromocriptine, Cabergoline, Aripiprazole
- Pramipexole, Ropinirol
- Ketamine, Metformin, Ondansetron
- Oxybutynin, Tolterodine, Darifencin
- Desmopressin, Varenicline









Ivabradine for clozapine induced tachycardia

• 35/M, a case of chronic treatment refractory schizophrenia showed significant improvement with clozapine and ECT



- ECT had to be withheld as his pulse rate on clozapine (400 mg/day) increased to 130-140 beats/minutes in spite of being on 80 mg of propranolol for akathisia
- His other investigations were normal (CBC, TFT, ECG etc.)
- After a medical reference he was started on Tab Ivabradine (5 mg) twice a day; his pulse rate decreases to around 100 beats/min and we could resume ECT in him

## Ivabradine, a novel treatment for clozapine-induced sinus tachycardia: a case series

(John Lally et al, Ther Adv Psychopharmacol. 2014 Jun; 4(3): 117–122.)

- We present two cases of patients with treatment-resistant schizophrenia who developed symptomatic tachycardia associated with clozapine therapy
- We demonstrate that the novel heart rate controlling agent Ivabradine can be effectively and safely used to control the heart rate and to allow for continued treatment with clozapine



# Ivabradine, a novel treatment for clozapine-induced sinus tachycardia: a case series

(John Lally et al, Ther Adv Psychopharmacol. 2014 Jun; 4(3): 117–122.)

 This is the first report in the literature demonstrating that Ivabradine appears to be a well tolerated agent, which should be considered as a symptomatic treatment of clozapine-induced tachycardia if the use of a β-blocker fails due to a lack of response or intolerability



#### Primidone for severe tremors

- 69/F, a case of Bipolar Mood Disorder, in mania, showed good response to Tab Olanzapine (20 mg/day) and Tab Divalproex Sodium (750 mg/day) but developed severe tremulousness which did not respond to 80 mg/day of propranolol
- Her symptoms would reappear on dose reduction
- Tab Primidone (250 mg) once a day (1 0 0) brought about almost complete remission in her tremulousness



#### Primidone for Essential Tremor

- Primidone, an anti-seizure drug, is also effective for treating essential tremor
- It is most useful for people with hand tremor
- Primidone appears to be as effective as Propranolol, with significant suppression of tremor in most patients
- Some people may develop tolerance to the treatment after about a year
- In most cases, Primidone is given to people who do not tolerate Propranolol
- Primidone can also be given in addition to Propranolol to improve the symptoms



## Clozapine induced sialorrhoea

- Muscarinic, adrenergic, histaminic & difficulty in swallowing
- Atropine 1% eye drops (swish and spit) 2-5 drops 2-3 times a day (Glycopyrrolate, Trihexyphenidyl)
- Clonidine (0.1 mg)
- Amitriptyline, Mirtazapine
- For dry mouth
- Pilocarpine 4% eye Drops &



People who drool while sleeping can count themselves lucky

BetterMe

• Saliva substitute, Carboxy Methyl Cellulose 0.5% (Wet Mouth)

#### Tolvaptan for Hyponatremia

- 53/F, a case of Major Depression on Tab Escitalopram (20 mg) at bedtime presented with weakness and low sodium level of 126 mEq/L. Clinically there was no evidence of dehydration and she was suspected to have SSRI (Escitalopram) induced SIADH
- She was asked to withhold Tab Escitalopram. She was asked to take only 800 ml of fluid per day, take  $\frac{1}{2}$  a teaspoon of extra salt and was started on Tab Tolvaptan (15 Mg) 1 - 0 - 0 for 4 days
- On a follow-up visit after 7 days her sodium level normalised and she no longer felt weak
- She was put on Tab Mirtazapine which has less chances of causing SIADH

#### Fludrocortisone (Floricot 100 mcg)

- 59-year-male, a case of schizophrenia and OCD on clozapine (50 mg) and clomipramine (75 mg) along with other medicines (not on antihypertensive)
- Complained to postural hypotension and fear that he may fall
- Tab Floricot (100 mcg) 0 0 1 (Dose: 50 to 200 mcg/day) (Rs 140 for 10 tabs)
- Take 2-3 L of water daily and high salt intake
- Head-up tilt at night, by raising the bedhead by blocks or firm pillow beneath the mattress, Change position slowly and carefully
- Tab Ephidrine (15 mg) 1 1 1 0, Tab Midodrine (2.5 mg) 1 1 1, (Rs 2000 per strip)
  Desmopressin nasal spray (10-40 mcg) (Rs 1000) at bedtime etc. are the other options



## Bromocriptine, Cabergoline, Aripiprazole (D2 Agonists)

- Bromocriptine may be used to treat NMS and conditions associated with psychotropic medication induced hyperprolactinemia like galactorrhoea, amenorrhea
- Dose : Tab B Crip / Tab Proctinal (2.5 mg) 1 1 1 to 4 4 4
- Cabergoline may be used for drug induced galactorrhoea and as an adjunct to SSRI antidepressants to counteracts reduced libido and anorgasmia
- Dose : Tab Cabgolin (0.25 mg) only once or twice a week for a week
- Aripiprazole may be used for drug induced amenorrhoea
- Dose : 2.5 to 15 mg



## Pramipexole, Ropinirol

- Pramipexole, a very useful drug for Bipolar Depression and Restless Leg Syndrome
- Dose : 0.25 mg to 3 mg /day (Pramipex, Pramirol, Mirator)
- Ropinirol is also promoted for Restless Leg Syndrome
- Dose : 0.5 mg/day (Ropark)



## Ketamine, Metformin, Ondansetron

- Ketamine for treatment resistant depression and OCD
- Metformin for olanzapine induced weight gain
- Ondansetron (5HT3 antagonist) for acidity and treatment

resistant schizophrenia with negative symptoms and alcohol use

| disorder  |  |   |   |   |               |
|-----------|--|---|---|---|---------------|
| uisui uei | The second s | NDC 0093-0233-93  | NDC 0093-0233-93  | Usual Dosage: See package insert for full   | 1             |
|           | NDC 42023-138-10<br>Ketamine HCI @<br>Injection, USP   | ONDANSETRON<br>HYDROCHLORIDE<br>Tablets<br>4 mg*  | ONDANSETRON<br>HYDROCHLORIDE<br>Tablets<br>4 mg*  | prescribing information.<br>Store at 20° to 25°C (68° to 77°F) [See USP<br>Controlled Boom Temperature].<br>This unit-dose package is not child-resistant. If<br>dispensed for outpatient use, a child-resistant<br>container should be utilized.<br>KEEP THIS AND ALL MEDICATIONS OUT OF<br>THE REACH OF CHILDREN.<br>Is. 6/2008 | METFORMIN     |
|           | 500 mg/10 mL<br>(50 mg/mL)   | *Each tablet contains 5 mg ondansetron<br>hydrochloride dihydrate equivalent to 4 mg<br>ondansentron. | *Each tablet contains 5 mg ondansetron<br>hydrochloride dihydrate equivalent to 4 mg<br>ondansentron. | Manufactured In Israel By:<br>TEVA PHARMACEUTICAL IND. LTD.<br>Jerusalem, 91010, Israel<br>Manufactured For:  | THE TICKET TO |
|           | For Slow Intravenous of<br>Intramuscular Use   | ${f R}$ only  | ${f R}$ only  | TEVA PHARMACEUTICALS USA<br>Sellersville, PA 18960  | WEIGHT LOSS?? |
|           | 10 mL Multiple Dose Val  | 100 Unit-dose Tablets (10 x 10s)<br>구려되기다   | 100 Unit-dose Tablets (10 x 10s)  | N 0093-0233-93<br>N 0093-0233-93<br>N 0093-0233-93<br>N 0093-0233-93<br>N 0093-0233-93  |               |

Oxybutynin, Tolterodine, Darifencin, (Imipramine)

(Imipramine, Desmopressin, Amitriptyline, Aripiprazole)

- For clozapine induced bed-wetting or incontinence in a patient having dementia
- Tab Oxyspas (2.5/5 mg) at bedtime
- Tab Roliten (2/4 mg) at bedtime
- Tab Darilong (7.5 mg) at bedtime



## Desmopressin, Varenicline

- A case of post head injury Diabetes Insipidus and Sugar Craving
- Desmopressin Nasal Spray (10 mcg/0.01ml) 10 to 40 mcg/day
- Tab Varenicline (0.5 mg and 1.0 mg) 1 0 1







# **Thank You**