ECHO IDAHO:
BEHAVIORAL HEALTH
IN PRIMARY CARE

Non-psychiatric medication prescribing: implications for mental health and psychiatric care
Aug. 19, 2020

The speakers have no relevant financial relationships

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LEARNING OBJECTIVES

• Review non-psychiatric medications that have implications for mental health and psychiatric care

• Review causes of confusion and psychotic symptoms in the setting of non-psychiatric medications and medical illness
CASE 1: LW 27 YO F BIPOLAR PATIENT

YOU HAVE FOLLOWED LW FOR 2 MONTHS ON THE FOLLOWING MEDICATIONS:

- Medication Allergies: Duloxetine (tremor), Fluoxetine (tremor, increased depression), Paroxetine (tremor)
- Levothyroxine 50mcg Q0630
- Oxcarbazepine ER 300mg BID
- Citalopram 10mg Daily
- Trazodone 100mg HS
- Quetiapine 400mg HS

LW wants to start birth control. What should you suggest?

- No adjustment to medication, just start combination ethinyl estradiol and levonorgestrel birth control (OBC)
- Suggest she consider medroxyprogesterone IM due to convenience of only dosing every 3 months
- Switch to lithium as oxcarbazepine is lacking evidence in treating bipolar and will not interact with OBC
- Switch to carbamazepine as oxcarbazepine is lacking in evidence in treating bipolar
- Switch to divalproex knowing you may have to use higher doses due to OBC decreasing plasma concentrations
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- Which of LW’s medications should be challenged to reduce or remove?
- What lab test should be verified to be within normal limits for LW?
KEY POINTS

BIRTH CONTROL

- Many mood stabilizers will interact with birth control
- Lithium can interact with medroxyprogesterone IM via kidney function
- Carbamazepine will decrease oral birth control effectiveness
CASE 2: EN 62 YO F ER FOLLOW UP PATIENT

EN IS FOLLOWING UP AT CLINIC FOLLOWING RECENT ER VISIT ON MEDICATIONS:

- Medication Allergies are: Haloperidol [Haldol] (itching), Fluoxetine (unknown), Omeprazole (itching)
- Levothyroxine 112mcg Q0630 (hypothyroidism)
- Cephalexin 500mg QID started 24hr ago in ER (UTI)
- Atorvastatin 10mg Daily (hyperlipidemia)
- Olanzapine 10mg HS started 24hr ago in ER (mood)
- Olanzapine 10mg Q6H PRN mood instability
- Gabapentin 400mg HS (restless leg syndrome)

- Was the best antibiotic chosen for this patient?
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- What lab test should be verified to be within normal limits for EN?
- How does your clinic/site clarify medication allergies?
KEY POINTS

UTI TREATMENTS

- Verify antibiotics are appropriate coverage and length of treatment
- Follow up on vague allergies and this can lead to increased cost
- Verify that the patient’s TSH is normal
57 yo female with a history of diabetes mellitus, presenting to psychiatric hospital with depression, self harm behavior

- Normal neurological exam
- Med list includes metformin
- Depression resistant to medications while inpatient
CASE 3 CONTINUED

- Labs drawn:
  - TSH 1.37—No thyroid dysfunction
  - A1c 6.7—Diabetes well controlled
  - CBC normal—No anemia
  - B12 level 205—low normal
B12 DEFICIENCY

- Symptoms:
  - Psychiatric effects: Cognitive defects, depression, altered mental status, delusions, irritability, paranoia, mania
  - Many physical effects-- neurologic, hematologic, loss of taste/smell

- Many causes
  - Metformin use (likely contributing in this case)
  - Antacid use
  - History of gastrectomy, gastric bypass, H. Pylori infection
  - Inflammatory bowel disease
  - Vegetarian/vegan diet
  - Nitrous oxide use (therapeutic or recreational)

- Should confirm low or low normal test with homocysteine and methylmalonic acid test if available

- Treatment: Oral or injectable vitamin B12
CASE 4

- 86 yo with a history of mild cognitive impairment, hypertension, mild depression presents with acute worsening of confusion (rearranging furniture for no reason, acute worsening of short-term memory) along with increased urinary frequency and new incontinence. Brought to clinic by daughter for evaluation.
Exam: Pleasant, but significantly more confused than baseline. Not oriented to place or time. Requires consistent redirection of topic

Urinalysis: + Nitrites, + leukocytes (consistent with infection)
# Delirium vs. Dementia

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>Delirium</th>
<th>Dementia</th>
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<tbody>
<tr>
<td>Forgetfulness, memory loss, impaired judgment</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Confusion and disorientation</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Paranoia</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Variable and fluctuating mental status</td>
<td>X</td>
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<td>Overt impairment—acute in onset</td>
<td>X</td>
<td></td>
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<tr>
<td>Frequent hallucinations</td>
<td>X</td>
<td></td>
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<tr>
<td>Insidious onset</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chronic and progressive course</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Normal behavior until advanced stages</td>
<td></td>
<td>X</td>
</tr>
</tbody>
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ASYMPTOMATIC BACTERIURIA

- DO NOT TREAT (in general)
- Delirium alone without ANY urinary symptoms—need to look for a different cause
  - Difficult in advanced dementia if cannot illicit symptoms
  - More common to have frequency/urgency, not pain
- Many other causes of delirium, not just UTI
  - Metabolic (hypoxia, hypothermia, hypoglycemia
  - Infections
  - Toxins and substances (illicit or prescribed or OTC)
CASE 5

- 27 yo patient presents with new onset depression
- Nexplanon birth control implant inserted 6 weeks prior
- Also with some relationship stress
- Reports depressed mood, poor sleep, poor concentration
COMMON PRESCRIPTIONS AND MOOD SYMPTOMS

- Depression/mood changes are a known side effect of hormonal contraception along with MANY other medications
- May be compounded if patient on multiple medications with depression as a side effect
  - Antacids
  - Anti-anxiety medication
  - Allergy medication
    - Montelukast—Recent black box warning for serious neuropsychiatric effects
  - Pain medications
    - Gabapentin, narcotics
  - Antidepressants
- Estimated prevalence of depression 15% for those reporting use of 3 or more medications with depression as an adverse effect vs. 4.7% for those not using such medications (JAMA, 2018;319(22)2289-2298)
REFERENCES

CARLSON


WHITAKER

• Qato DM, PharmD, PhD; Ozenberger K, MS; Olfson M, MD MPH. Prevalence of Prescription Medications with Depression as a Potential Adverse Effect Among Adults in the United States. JAMA, 2018;319(22)2289-2298)


• Additional resources available upon request.
ONGOING RESOURCE LIST

RESOURCES FROM TODAY’S SESSION AND PAST SESSIONS CAN BE FOUND IN OUR ONGOING RESOURCE LIST.

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