## Episode 24: Alcohol in Clinic

[Music to start: Grieg’s Morning Mood (<https://www.youtube.com/watch?v=-rh8gMvzPw0>)

*The sun rises over the San Joaquin Valley, California, today is August 21, 2020****.***

Fresh from the oven! The USPSTF issued the following recommendation on August 18, 2020: All sexually active adolescents and adults at increased risk should receive behavioral counseling to prevent Sexually Transmitted Infections (STIs).Counseling results in a moderate net benefit in prevention of STIs, a Grade B recommendation, which means the benefit is moderate to substantial, so offer this service to your patients.

Some examples of patients who can benefit from counseling are those who have a current STI, do not use condoms, have multiple partners, belong to a sexual and gender minority, HIV patients, IV drug users, persons in correctional facilities, and others.

Offering counseling in person for 30 minutes or less in a single session may be effective, but the strongest effect was found in group counseling for more than 120 minutes, delivered in several sessions. Other options include referring patients for counseling services or inform them about media-based interventions. Of note, there are about 20 million new STIs every year in the US (1).

[Music mixes with country Chris Haugen - Cattleshire - Country & Folk <https://www.youtube.com/watch?v=WiYqHkH4Tnc&list=PLYo1YtVKirP-LAZ3AjpIiJNW9KIe1MJLw&index=7>]

*Welcome to Rio Bravo qWeek, the podcast of the Rio Bravo Family Medicine Residency Program, recorded weekly from Bakersfield, California, the land where growing is happening everywhere.*

*The Rio Bravo Family Medicine Residency Program trains residents and students to prevent illnesses and bring health and hope to our community. Our mission: To Seek, Teach and Serve.*

*Sponsored by Clinica Sierra Vista, Providing compassionate and affordable care to patients throughout Kern and Fresno counties since 1971.* [Music continues and fades…]

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[MUSIC]

[Quote]

**“The illiterate of the 21st century will not be those who cannot read and write but those who cannot learn, unlearn, and relearn” –Alvin Toffler.**

Sometimes there are things we need to unlearn. We see that frequently in Medicine. New guidelines, recommendations, tests, and treatments are updated regularly. We need to make sure we never stop learning, unlearning and relearning; and residency is just part of the beginning of a life-long commitment to learn. Today we have a dynamic intern. She started just one month ago her residency. I’m happy to welcome Ariana Lundquist today.

**Question number 1: Who are you?**

Hi, my name is Ariana and I am a first-year resident at Rio Bravo Family Medicine Residency.  I am a California girl through and through from Orange County, California. I grew up surfing every weekend with my dad who also is a family physician. Early on I knew I wanted to be a doctor because I really loved being at my father's private practice.

My mom had her private practice at my father's clinic, and so every day after school she would pick my sister and I up and take us to clinic.  We would run around and interact with every patient.  We truly grew up in the clinic and I cherish those memories as an adult.

I went to Canyon high school where I did water polo and swim.  For undergrad, I went to Cal State Long Beach where I majored in cell molecular biology with a minor in general chemistry and surfing.  I then went to the beautiful island of Dominica to attend medical school at Ross University.

My last 2 years of medical school were spent in Bakersfield.  As someone who loves the heat and sweet hospitality, Bakersfield was really fit for me.  I truly am excited to learn and grow as a physician here in Bakersfield with the Rio Bravo family medicine team.

For fun, I still try to surf whenever I get a chance, free dive, scuba dive, karaoke, and spend time with my family.

**Question number 2: What did you learn this week?**

This week I was working on my quality improvement project with my co-resident Dr. Civelli on alcohol withdrawals in a hospital setting.  During the research, I was wondering about how you would treat alcohol withdrawals in a clinic setting.  We encounter a lot of patients who, when they are willing to open up about it, admit to having alcohol dependency.

It is never a simple subject to talk about with patients because most people either feel that they have their alcoholism under control or that they are ashamed by the amount that they drink.  Once the patient is honest with you about the amount they drink and you realize that they are above the recommended daily intake, that is when you start to assess their willingness to quit.  That alone is another subject for a pod cast in the future, but if someone is willing to quit you have to consider if that patient is somebody who might have withdrawal symptoms.

**Timing of alcohol withdrawal syndromes**

|  |  |  |
| --- | --- | --- |
| Syndrome  | Clinical findings  | Onset after last drink  |
| Minor withdrawal | Tremulousness, mild anxiety, headache, diaphoresis, palpitations, anorexia, gastrointestinal upset; normal mental status | 6 to 36 hours |
| Seizures | Single or brief flurry of generalized tonic-clonic seizures, short postictal period; status epilepticus rare | 6 to 48 hours |
| Alcoholic hallucinosis | Visual, auditory, and/or tactile hallucinations with intact orientation and normal vital signs | 12 to 48 hours |
| Delirium tremens | Delirium, agitation, tachycardia, hypertension, fever, diaphoresis | 48 to 96 hours |

**Patient assessment**

1) Substance use history questions include:
-Duration of disorder?

-When was your last drink?

-How many drinks per day, and days per week?

-History of withdrawal seizure or delirium tremens

-Medical complications related to alcohol

-Number of prior supervised withdrawal episodes?

2) General Physical Exam w/ vitals

3) Labs: CBC w/diff, blood glucose, electrolytes, calcium, magnesium, phosphorous, anion gap, renal and hepatic function

4) Withdrawal Symptoms

**Clinical Institute Withdrawal Assessment for Alcohol Scale, Revised (CIWA)**: There are 10 areas to examine in this scale. Evaluate each area and assign a score (see details below):

1. NAUSEA AND VOMITING: Ask "Do you feel sick to your stomach? Have you vomited?" Observation.

2. TACTILE DISTURBANCES: Ask "Do you have any itching, pins and needles sensations, burning sensations, numbness, or the feeling of bugs crawling on or under your skin?" Observation.

3. TREMOR: Arms extended and fingers spread apart. Observation.

4. AUDITORY DISTURBANCES: Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation.

5. Paroxysmal sweats. Observation.

6. VISUAL DISTURBANCES: Ask "Does the light appear to be too bright? Is its color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation.

7. ANXIETY: Ask "Do you feel nervous?" Observation.

8. HEADACHE, FULLNESS IN HEAD: Ask "Does your head feel different? Does it feel as if there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity.

9. AGITATION: Observation.

10. ORIENTATION AND CLOUDING OF SENSORIUM: Ask "What day is this? Where are you? Who am I?" Count forward by three.

**Interpretation of CIWA score**

|  |  |  |
| --- | --- | --- |
| 0 to 9 points: | Very mild withdrawal | Outpatient management |
| 10 to 15 points: | Mild withdrawal |
| 16 to 20 points: | Modest withdrawal | **Inpatient management** |
| 21 to 67 points: | Severe withdrawal |



5) Co-morbidities

If patient shows no symptoms in first 24 hours and they are not at risk for major withdrawal, no medication is indicated as symptoms are unlikely to develop.

Ambulatory Criteria:

•A patient with mild symptoms of alcohol withdrawal (CIWA-Ar <15), or asymptomatic patient with a history of symptoms with past attempts to reduce their drinking

•No history of delirium tremens or alcohol withdrawal seizures

**Additional indications**for the ambulatory setting include:

•Cognitively intact and motivated to avoid alcohol

•Ability to take oral medications

•Ability to commit to near daily medical visits

•Absence of comorbid medical or psychiatric conditions and/or marked abnormalities on physical examination or laboratory evaluation

If any of the following occur then the patient needs to be monitored in an inpatient setting:

Fever

•Disorientation

•Drenching sweats

•Severe tachycardia

•Hypertension

•Pregnancy

•Concurrent substance use that could lead to withdrawal symptoms (eg, benzodiazepines)

•Markedly abnormal laboratory values

Treatment can last from 2 days to 1 week. It is best to have daily in-person appointments with the patient. If they are unable to come to daily appointments then phone follow-ups every day is acceptable. If low risk after 24 hours, then phone follow-up every other day. It is also recommended to have a family member or friend monitor the patient’s symptoms and treatment use. It is extremely important to re-evaluate CIWA-Ar and vitals every appointment. Efficacy is higher in inpatient setting than outpatient setting (95 versus 72%) [1].

**Treatment:**

Long-acting Benzodiazepine and multivitamins containing thiamine and folate. Also use Beta-blocker (Atenolol) for tachycardia and hypertension. Clonidine can also be used if hypertension is severe

1st Line Benzo use: Chlodiazepoxide

Short-Acting Benzo primarily used in inpatient setting or those with hepatic dysfunction.

Gabapentin can also be used because there is less sedation, less cognitive impairment, and less psychomotor impairment. Why don’t we use it more often?? More studies exist showing the potent efficacy of Benzos and they cannot be used to prevent/treat seizures and delirium tremens secondary to alcohol withdrawals.

**Ambulatory supervised alcohol withdrawal**

* **Benzodiazepines for very mild withdrawal symptoms (CIWA-Ar score <10) - Symptom-triggered**
1. Chlordiazepoxide (long-acting): Day 1 - 50 mg every 6 to 12 hours as needed

 Days 2 to 5 - 25 mg every 6 hours as needed

1. Diazepam (long-acting): Day 1 - 20 mg every 6 to 12 hours as needed

Days 2 to 5 - 10 mg every 6 to 12 hours as needed

1. Oxazepam (shorter-acting): Day 1 - 30 mg every 6 hours as needed

 Days 2 to 5 - 15 mg every 6 hours as needed

* **Benzodiazepines for mild withdrawal symptoms (CIWA-Ar score 10 to 15) - Fixed dose**
1. Chlordiazepoxide (long-acting): Day 1 - 50 mg every 6 to 12 hours

 Day 2 - 25 mg every 6 hours

 Day 3 - 25 mg twice a day

 Day 4 - 25 mg at night

1. Diazepam (long-acting): Day 1 - 20 mg every 6 to 12 hours

Day 2 - 10 mg every 6 hours

Day 3 - 10 mg twice a day

Day 4 - 10 mg at night

1. Oxazepam (shorter-acting): Day 1 - 30 mg every 6 hours

 Day 2 - 30 mg every 8 hours

 Day 3 - 30 mg every 12 hours

 Day 4 - 30 mg at night\*

* **Gabapentin for very mild to mild withdrawal symptoms (CIWA-Ar score 0 to 15) - Fixed dosing**
1. Gabapentin: Day 1 - 300 mg every 6 hours

Day 2 - 300 mg every 8 hours

Day 3 - 300 mg every 12 hours

Day 4 - 300 mg one dose\*

* **Nutritional support:** Thiamine 100 mg for 3 days, multivitamins maintenance

Important: Withdrawal in some patients will progress at different rates and end before or after four days, requiring some "as needed" flexibility in dosing.

**Resources for Assistance in Long-Term Abstinence from Alcohol Use**

Al-Anon Family Groups: <http://www.al-anon-alateen.org>

Alcoholics Anonymous: <http://www.alcoholics-anonymous.org>

American Council on Alcoholism: <http://www.aca-usa.com>

National Council on Alcoholism and Drug Dependence: <http://www.ncadd.org>

National Institute on Alcohol Abuse and Alcoholism: <http://www.niaaa.nih.gov>, <http://rethinkingdrinking.niaaa.nih.gov>

Substance Abuse and Mental Health Services Administration: <http://www.samhsa.gov>

**Question Number 3:** **Why is this knowledge important?**

I think it is important as physicians that we are able to assess, based on their history that they have given, if they are at risk for mild to severe withdrawals.  Treating mild versus severe are completely different.  Severe withdrawals require inpatient treatment and monitoring because of the high risk of complications including death.  Milder symptoms are the ones that can be treated outpatient.

**Comment: Underserved, low resources, COVID.**

**Question number 4:** **How did you get that knowledge?**

I started researching on up-to-date.com about mild alcohol withdrawal treatment and management in an outpatient setting.  Again, I stress how important it is to find a way to have your patients open up about their alcohol use because it can really make a difference when they do decide to quit.  We will be able to provide them with the tools on what to expect when quitting alcohol and determining if the patient will experience mild or severe symptoms.  Based on that alone you can determine if the patient needs to have close monitoring or just follow-ups at the clinic.

**Question number 5: Where did you get that knowledge?**

The information discussed was condensed from a section from Up-To-Date " Ambulatory Management of Alcohol Withdrawal" and an AAFP article titled “Outpatient Management of Alcohol Withdrawal Syndrome”.

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**Speaking Medical: Potomania**by Dr. Valeri Civelli

The words that end in “mania” may sound interesting or exciting to some people, and sometimes may even have a funny connotation, however, those words may describe very serious conditions. Such is the case of *Potomania*. *Potomania* comes from the Latin“poto” (drinking heavily) and “mania” (craze). *Potomania* was first described in 1972 as a unique syndrome of hyponatremia caused by excessive alcohol intake, usually beer, for that reason it was called *beer potomania*.

Hyponatremia in *beer potomania* is explained by low solutes in plasma caused by low intake of protein and other foods. Hyponatremia is then worsened by excessive drinking of beer, which is a low-sodium liquid. The combination of low intake of food or malnourishment and excessive beer drinking may result in severe hyponatremia and even cause death. So, next time you see a patient with hyponatremia, don’t forget about *beer potomania.*

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[Music]

**Espanish Por Favor:** **Temblor**by Dr Claudia Carranza

Hi this is Dr Carranza on our section Espanish Por Favor. This week’s word is *temblor*.

*Temblor* means tremors or shaking, but it can also mean earthquake. Patient’s will come to you with the complaint “Doctor, tengo temblor en las manos” or “Doctor, me siento tembloroso”. NO this does not mean your patient has an earthquake in their hands! It means “Doctor, I have tremors in my hands” or “Doctor, I feel tremulous”.

Since we just talked about alcohol withdrawals you can put that as your top differential of your *temblor* and dig a bit about social history. If your patient has history of alcohol abuse and just stopped drinking then that’s most likely going to be the cause of the *temblor*. Otherwise, ask yourself: is this *temblor* a rest tremor or intention (action) tremor? If the *temblor* happens at rest, then think of Parkinson’s disease. If the *temblor* is present with actions, then think of physiologic tremor (which can be caused by anxiety or drugs) vs essential tremor, among others.

Now you know the Spanish word of the week, *temblor.*

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[Music]

**For your Sanity**
by Steven Saito

A curious code in the military: Leaving a red tide bottle by your door means “you are down for action”.

[Music to end: [Jeremy Blake - Stardrive - Rock | Bright](https://www.youtube.com/watch?v=Qmkd8ucEVbU) ]

Now we conclude our episode number 24 “Alcohol in Clinic”, we purposefully gave this episode a misleading name for the curious mind. Dr Lundquist explained how to assist patients with alcohol withdrawal symptoms in clinic. Mastering outpatient management of alcohol withdrawal will allow you assist your patients who want to quit drinking. Remember to use an assessment tool such as CIWA (pronounced Ci-wah) to guide your management. Staying on the same topic, Dr Civelli explained *beer potomania* as a cause of hyponatremia; and Dr Carranza taugut us how to say tremors in Spanish: *temblor* (pronounced taim-bloar)

*This is the end of Rio Bravo qWeek. We say good bye from Bakersfield, a special place in the beautiful Central Valley of California, United States, a land where growing is happening everywhere.*

*If you have any feedback about this podcast, contact us by email RBresidency@clinicasierravista.org, or visit our website riobravofmrp.org/qweek. This podcast was created with educational purposes only. Visit your primary care physician for additional medical advice.*

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*Our podcast team is Hector Arreaza, Ariana Lundquist, Valeri Civelli, Claudia Carranza, \*\*\*ADD GUESTS\*\*\*\* Audio edition: Suraj Amrutia. See you soon!*

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2. [Stephen R Holt, MD, MS, FACP](https://www.uptodate.com/contents/ambulatory-management-of-alcohol-withdrawal/contributors) and col., “Ambulatory Management of Alcohol Withdrawal”, UpToDate, <https://www.uptodate.com/contents/ambulatory-management-of-alcohol-withdrawal?search=alcohol%20withdrawal%20treatment%20outpatient&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1>, updated on Jan 10, 2020,accessed on August 12, 2020.
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