

Treatment Planning for Harvey

Practice at Home Activity

Knowledge Sharing

Participants will be pre-assigned into small groups within zoom breakout rooms to discuss the case in 10 minutes and then conclude with a large group discussion.

Treatment Plan for Harvey (Tobacco Use Disorder)

- Faculty will lead a brief overview of Harvey's case.
- Work with your group to develop an appropriate treatment plan to propose for Harvey. Refer to the information provided about **Tobacco Use Disorder Treatment Medications**.
- Answer the questions below in relation to this case.
- Faculty will call "time" and bring the group together for discussion. Group leaders will be called upon to answer each of the questions below.

Harvey – Treatment for Smoking Cessation

Case Information

Harvey is a 58-year old man who works as a truck driver and has a 30 pack-year smoking history. He currently smokes 30 cigarettes per day and smokes his first cigarette while sitting on the side of the bed when he wakes up.

He has tried to quit smoking many times using nicotine. He lacks confidence in his ability to quit but is asking for help because he recently learned that he has mild COPD. Harvey is married and has 3 adult children. He has mild intermittent depression.

His physical exam and labs are unremarkable.

Key Considerations

1. Would you treat Harvey initially as an outpatient or an inpatient?
2. How would you treat withdrawal symptoms? Which medication(s) would you use?
3. Which medication(s) would you recommend for maintenance?
4. What is the proposed duration of treatment?
5. What other treatment(s) you would recommend in addition to medication?
6. What harm reduction options would you consider?

Medications for Substance Use Disorder Treatment

Tobacco Use Disorder Treatment Medications

FDA-Approved

Combined Nicotine replacement therapies (NRT) are available in many forms including a long-acting daily patch and several short-acting options. These are most effective when used in combination, with the patch providing baseline control of nicotine withdrawal symptoms and the short-acting agents addressing craving and breakthrough withdrawal symptoms. Patches, gum, and lozenges are available over the counter, while the nasal spray and oral inhaler require prescription. People who smoke > 10 cigarettes (1/2 pack) per day should start with the highest dose patch (21 mg) and taper the dose over 10 weeks. Those who smoke less should start with the 14 mg patch. Patients should also use a short acting form of NRT concurrently. Starting treatment with more than one daily patch (plus a short acting agent such as gum or lozenges) may be appropriate for patients who smoke more than 1 pack per day.

Varenicline (Chantix®) is a partial agonist at the nicotinic acetylcholine receptor. It is initiated at a dose of 0.5 mg/day and rapidly titrated to the effective dose of 1 mg BID. It should be started at least one week before the planned quit date and continued for 12 weeks or longer. Administration with food and water reduces the risk of nausea. There is some mixed evidence that it is associated with neuropsychiatric symptoms, although the FDA has removed the boxed warning with regards to serious neuropsychiatric events. Its use is not recommended in patients who are psychotic or markedly mentally unstable. Recent data also suggest that use of varenicline may intensify the intoxicating effects of alcohol. Follow up monitoring should be arranged for all patients within one week of starting treatment.

Bupropion (Zyban®) is also used as an anti-depressant that works by enhancing noradrenergic and dopaminergic release. Compared with other medications used for smoking cessation, bupropion is associated with less short-term weight gain; however, this appears to be a temporary effect. Treatment is initiated at dose of 150 mg daily for the first three days and then increased to 150 mg BID. Although usually treatment lasts for 4 weeks, treatment may be continued for up to a year. Bupropion decreases the seizure threshold and may also be associated with neuropsychiatric symptoms. Follow up monitoring should be arranged for all patients within one week of starting treatment.

Off-label

Nortriptyline is a tricyclic antidepressant but the exact mechanism of action for smoking cessation is unknown. Nevertheless, it has been effective regardless of comorbid depression. The dosing is similar to that for the treatment of depression and blood levels should be checked when a steady state has been reached. The initial dose is 25 mg/day initiated between 10-28 days before quit date with a gradual increase to 75-100 mg/day over 10 days to 5 weeks. The course of treatment is 12 weeks. The medication should then be gradually tapered to prevent discontinuation side effects. Due to the anticholinergic effects, exercise caution in the elderly and those with cardiovascular disease.

Clonidine is a centrally acting alpha-agonist hypotensive agent that is effective in smoking cessation. The exact mechanism of action is unknown. The dose ranges from 0.15–0.75 mg/day by mouth and from 0.10–0.20 mg/day transdermal (TTS). There is no clear dose response relationship. Initial dosing is typically 0.10 mg BID orally or 0.10 mg/day TTS, increasing by 0.10 mg/day per week if needed. The treatment duration ranges from 3–10 weeks. Smoking cessation should be initiated between 0 to 3 days after starting the medication. Patients should be cautioned not to stop the medication abruptly due to rebound hypertension. The most significant side effects include dry mouth, sedation, dizziness, and constipation.