

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

TREATMENT OF LATENT TUBERCULOSIS

If you have been diagnosed with latent tuberculosis infection (LTBI), TB bacteria are living in your body without making you sick or contagious. This is because your immune system is controlling the infection, making it inactive. However, without treatment, 5-10% of people with LTBI will develop active TB disease sometime later in their lives. Active TB occurs when the TB bacteria overwhelm the immune system and attack the body, most commonly the lungs. Active TB is a serious illness and can be fatal if left untreated. Treatment of LTBI greatly reduces the risk of developing active TB and spreading the infection to others.

WHAT ARE LTBI TREATMENT OPTIONS?

Several options are available for the treatment of latent TB. All appear to be equally effective. However, regimens containing rifamycin drugs (ie. rifampin, rifapentine) are generally recommended due to a lower risk of liver toxicity and shorter treatment courses.

❖ Rifamycin-Based Regimens

- Rifampin taken once daily for 4 months.
- Isoniazid plus rifampin taken once daily for 3 months.
- Isoniazid plus rifapentine taken once weekly for 3 months (usually under the direct observation of a trained health care provider).
 - Isoniazid plus rifapentine is a free treatment option offered through the Richmond City Health Department. You will be referred to their office at 400 E. Cary Street for the initial evaluation. To schedule an appointment, call 804-482-5500, option 3.
 - After being seen at the Health Department, weekly appointments can be made at Student Health to meet with a medical provider to take your medications. Self-administration may be considered in patients who can reliably take their medications on time and agree to notify their provider immediately of any side effects.
 - This regimen is not recommended for individuals who are pregnant or breastfeeding.

❖ Isoniazid

- Isoniazid taken once daily for 6 or 9 months is an effective alternative for people who cannot take rifampin or rifapentine.
- Isoniazid is currently also considered an alternate regimen in patients with newly diagnosed LTBI because of nitrosamine impurities detected in samples of rifampin and rifapentine by the FDA in August 2020.

WHAT ARE POSSIBLE SIDE EFFECTS?

- ❖ **Liver injury:** Though few people experience side effects, the medications used to treat TB can increase the risk of liver injury. This risk is highest with isoniazid and lower with the rifamycin-based regimens.
 - Depending on your medical history, your healthcare provider may order blood tests to check your liver function before and/or during treatment.
 - To decrease the risk of liver injury, it is very important to **avoid drinking alcohol** or **taking medicines that affect the liver, such as acetaminophen (Tylenol), during treatment.**
 - Stop the medication and contact your medical provider immediately if you develop signs of liver injury, which are listed at the bottom of the next page.
- ❖ **Numbness & tingling:** Up to 2% of patients taking isoniazid develop numbness and tingling in their hands and feet. This is because isoniazid can interfere with the metabolism of vitamin B6. To prevent this side effect, your healthcare provider may recommend taking a vitamin B6 supplement (25 to 50mg) daily, especially if you have diabetes, seizures, or HIV. Patients who are pregnant or breastfeeding should also supplement with B6.

- ❖ **Orange discoloration:** Rifampin and rifapentine may cause your urine, saliva, or tears to become orange. This discoloration is harmless but may permanently stain soft contact lenses.
- ❖ **Flu-like symptoms:** A small number of patients taking isoniazid plus rifapentine experience flu-like symptoms, dizziness, and/or fainting. It is important to contact your medical provider immediately if you develop these symptoms.

WHAT ARE POSSIBLE DRUG INTERACTIONS?

It is important to review all medications with your healthcare provider before and during TB treatment due to the risk of drug interactions. Examples include the following:

- ❖ **Isoniazid** increases blood levels of phenytoin (Dilantin), a medication used for seizures.
- ❖ **Rifampin and rifapentine** decrease blood levels of many drugs, including birth control pills, warfarin (a blood thinner), sulfonyleureas (a diabetes medicine), some blood pressure medications (beta blockers & calcium channel blockers), some antidepressants, many HIV medications, and others. Women using hormonal birth control should consider another form of birth control, such as condoms.

HOW ARE THESE DRUGS BEST TAKEN?

- ❖ **Isoniazid and rifampin** are best taken on an empty stomach 1 hour before or 2 hours after meals. However, it is okay to take these medications with food if stomach upset occurs.
- ❖ **Isoniazid and rifapentine** should be taken together at the same time. Rifapentine can be taken with food to increase absorption.
- ❖ **If you are taking an antacid**, take Rifampin at least 1 hour before taking the antacid. Antacids can decrease rifampin absorption.

WHAT IF I MISS A DOSE?

It is very important to take your medications as prescribed at the same time with each dose. Missing doses frequently will increase the risk of developing drug resistance.

- ❖ If you miss a dose, take it as soon as you remember. If it is close to the time for the next dose, skip the missed dose and take your next scheduled dose.
- ❖ Do not take 2 doses at the same time.

HOW OFTEN WILL I NEED FOLLOW-UP?

You should be evaluated by your medical provider at least once a month during treatment to monitor for symptoms of active TB disease, medication side effects, and to receive medication refills.

STOP YOUR MEDICATION & SEEK MEDICAL ATTENTION IMMEDIATELY IF YOU HAVE ANY OF THE FOLLOWING:

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| ▪ Yellowing of the eyes or skin | ▪ Numbness/tingling of the hands/feet |
| ▪ Abdominal pain | ▪ Fever |
| ▪ Persistent nausea or vomiting | ▪ Easy bruising or bleeding |
| ▪ Unexplained loss of appetite | ▪ Severe weakness or fatigue |
| ▪ Dark tea-colored urine | ▪ Dizziness |
| ▪ Very light-colored stools | ▪ Symptoms of an allergic reaction, such as rash, itching, swelling, or trouble breathing |
| ▪ Skin rash or itching | |

RECOMMENDED WEBSITES:

www.cdc.gov, ethnomed.org, www.healthfinder.gov, heartlandntbc.org