

PHARMACY

Drug Information

Medications to Treat Liver Cirrhosis



What is Liver Cirrhosis?

- Liver cirrhosis refers to the scarring of the liver. In its advanced stage, there is increased blood pressure within the veins in the liver (portal hypertension), which may lead to complications such as excessive accumulation of fluid in the abdomen and legs, and also bleeding from the gut.
- Liver cirrhosis may also lead to accumulation of ammonia (toxin), which can affect the brain.

What are the Medications Used to Treat Liver Cirrhosis?

Medication Class	Medication Name
Beta-blockers	<ul style="list-style-type: none"> • Propranolol (most common) • Carvedilol • Bisoprolol
Diuretics	<ul style="list-style-type: none"> • Spironolactone • Frusemide
Laxative	<ul style="list-style-type: none"> • Lactulose
Antibiotic	<ul style="list-style-type: none"> • Rifaximin

How Do the Medications Work?

Medication Class	Benefits of Medication
Beta-blockers	<ul style="list-style-type: none"> • Reduces portal hypertension and its complications such as ascites (abdominal fluid accumulation) and variceal bleeding (bleeding from blood vessels at lower oesophagus and stomach)
Diuretics	<ul style="list-style-type: none"> • Removes excessive fluid accumulated in the body, especially water retention in the legs and abdomen
Laxative	<ul style="list-style-type: none"> • Reduces absorption of ammonia from the gut into the rest of the body, which causes hepatic encephalopathy (liver coma) – a condition

	where the liver cannot adequately remove toxins from the blood
Antibiotic	<ul style="list-style-type: none"> Regulates bacteria in the gut to reduce inflammation and lower chances of bacteria entering bloodstream. Infection can happen when bacteria enter the bloodstream (bacteraemia).

How are the Medications Administered / Taken?

- Propranolol may be taken with or after food.
- Diuretics increase urination, hence they should preferably be taken in the evening at the following times:
 - Furosemide should be taken before 4pm to prevent late night visits to the toilet, which disturbs sleep.
 - Spironolactone should be taken after food to prevent stomach irritation and to improve absorption of the medication.
- Lactulose may be taken with or without food. It should be noted that Lactulose tastes very sweet, but patients with diabetes can take Lactulose as it does not contribute to the blood sugar levels.

What Should I Do if I Miss a Dose?

- If you miss a dose, take the missed dose as soon as you remember. If it is almost time for your next dose, take only the usual dose. Never take a double dosage to make up for the missed dose.

Can the Medications be Administered / Taken with Other Medications?

- You will need to continue your other medications unless your doctor advises otherwise.

It is important that you inform the doctor, pharmacist about other medications – including over-the-counter medicines, supplements and traditional/herbal remedies – that you are currently taking, as they may affect the way you benefit from the medications that treat liver cirrhosis.

What are the Important Side Effects?

- Medications prescribed by your doctor should be beneficial for your condition even though they may result in some inevitable side effects.

Medication Class	Side Effect	Management
All Medications	Allergic reaction (rashes, facial swelling or shortness of breath after taking the medication)	<ul style="list-style-type: none"> Seek immediate medical attention
Diuretics	Disturbance to salt levels in the body	<ul style="list-style-type: none"> Be watchful of your diet (e.g. avoid excessive intake of "pan salt")
Beta-blockers	Asthma (rare), chest pain, dizziness, weakness, slow heartbeat, drowsiness	<ul style="list-style-type: none"> Improves as you get used to the medicine or with dose reduction If you experience chest pain, stop the medication and seek medical attention immediately
Laxative	Flatulence (increased passage of gas, abdominal bloating, belching), stomach cramps, diarrhoea	<ul style="list-style-type: none"> If the frequency of you passing stool has increased to more than three times daily, reduce the dose. If the condition persists, stop the medication and seek immediate medical attention

If you develop rashes, facial swelling or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

Are There Any Special Precautions That I Need to Take?

- It is important to inform your doctor if you intend to conceive or breastfeed while taking this medication.

What Else Can I Do to Help My Condition?

- Avoid alcohol.
- Cut down on salt intake to reduce swelling in feet and abdomen.
- Lose weight if you are overweight or obese.
- Exercise regularly to reduce muscle wasting.
- Have good hand hygiene to reduce chances of developing infections.

How Do I Store These Medications?

- Store your medication in a cool, dry place away from heat, moisture and direct sunlight.

If you have any problem with your treatment, please contact your doctor, pharmacist or nurse clinician.

Please keep all medications out of reach of children.

