

## **Rifaximin for the treatment of hepatic encephalopathy**

Hepatic encephalopathy (HE) is a reversible neuropsychiatric disorder caused by accumulation of toxins in the bloodstream that are normally removed by the liver. HE encompasses a spectrum of neuropsychiatric abnormalities seen in patients with established liver disease, and is most commonly associated with liver cirrhosis. Patients with HE may experience symptoms ranging from subtle neurological abnormalities (e.g., mood alterations, changes in reaction times in daily activities such as driving), to severe neurological impairment (e.g., difficulty in moving and communicating) and in extreme cases, coma.

Current pharmacological management of HE involves using disaccharides (such as lactulose), to convert soluble ammonia to insoluble ammonium, with or without Rifaximin, to inhibit ammonia-generating bacteria. Rifaximin is recommended by NICE, within its marketing authorization, as an option for reducing the recurrence of episodes of overt HE in people aged 18 years or older ([NICE TA 377](#)). People with HE may receive lactulose to prevent recurrence of HE episodes.

Whilst lactulose is not licensed for the reduction in recurrence of episodes of overt HE, it is the current standard of care, and is the most routinely used therapeutic option for patients with ongoing HE at this time. Lactulose will remain as the first line treatment for HE, and all patients eligible for rifaximin will also continue lactulose **if tolerated**.

### **Rifaximin**

Rifaximin is a minimally absorbed antibiotic agent that has activity against ammonia-producing bacteria found in the gastrointestinal tract. It reduces the production of ammonia, the substance which is responsible for the symptoms of HE.

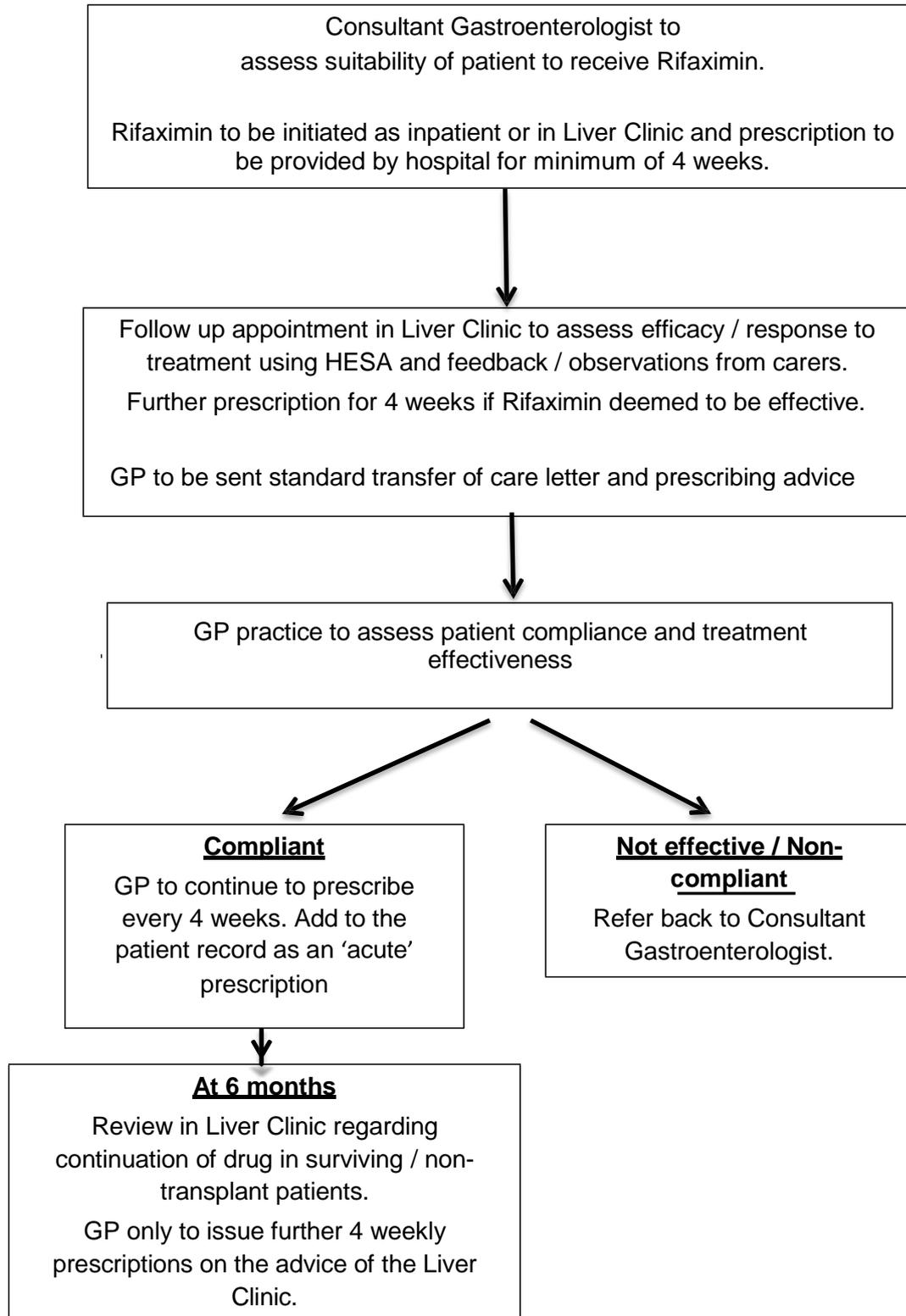
Contraindications: known hypersensitivity to rifaximin or rifamycin-derivatives and patients with intestinal obstruction.

Cautions: risk factors for developing *Clostridium difficile* infection, and patients with severe hepatic impairment (Childs-Pugh C or MELD score  $\geq 25$ ).

Rifaximin should not be used in combination with any other rifamycin-derivatives.

This medication should be withdrawn in the event of adverse reactions and contraindications with an unacceptable risk to the patient, if it is deemed to be ineffective, the patient becomes pregnant, or is seen to be non-compliant.

## Rifaximin Prescribing Pathway



- All transplant candidates continuing on rifaximin will be reviewed in the Liver Clinic at regular intervals.
- Treatment should be discontinued if ineffective.
- Treatment can continue if patient consumes alcohol providing the treatment is still beneficial.