1. BACKGROUND

Rifaximin is a non-absorbed semi-synthetic derivative of rifamycin with a wide spectrum of antibacterial activity against aerobic and anaerobic gram-positive and gram-negative organisms. It acts by binding to the β-subunit of bacterial DNA-dependent RNA polymerase resulting in inhibition of bacterial RNA synthesis. In hepatic encephalopathy (HE) it is thought to reduce the colony count of ammonia producing gut flora and to decrease the systemic absorption of ammonia from the intestinal lumen.

Note
Rifaximin is also licensed for traveller’s diarrhoea (at a different dose to that mentioned below) - not routinely commissioned within Hull and East Riding.

Rifaximin is also approved for treatment of bacterial colonisation of small bowel in immunodefficient patients– (at a different dose to that mentioned below). This is an unlicensed indication for prescribing by Consultant Immunologist only (Red indication)

2. INDICATION

Reducing recurrence of episodes of overt hepatic encephalopathy in adults (NICE TA337)

3. DOSE

550mg twice daily

Initial treatment should be continued until specialist review. Specialist team will advise on ongoing treatment following review, usually at 6 months.

4. CONTRAINDICATIONS AND CAUTIONS

Contraindications
- Hypersensitivity to rifaximin, rifamycin-derivatives or to any of the excipients
- Cases of intestinal obstruction
- Pregnancy and breastfeeding

Cautions
- Hepatic Impairment: use with caution in patients with severe (Child-Pugh C) hepatic impairment and in patients with MELD (Model for End-Stage Liver Disease) score > 25.
- The potential association of rifaximin treatment with Clostridium difficile associated diarrhoea and pseudomembranous colitis (PMC) cannot be ruled out.

5. DRUG INTERACTIONS

- Other rifamycins (e.g. rifampicin) – avoid concomitant use
- Combined oral contraceptives – reduced effects of COCs have not been reported. However due to effects of rifaximin on gut flora, manufacturer recommends to take additional contraceptive precautions.
In healthy subjects, clinical drug interaction studies demonstrated that rifaximin did not significantly affect the pharmacokinetics of CYP3A4 substrates, however, in hepatic impaired patients it cannot be excluded that rifaximin may decrease the exposure of concomitant CYP3A4 substrates administered (e.g. warfarin, antiepileptics, antiarrhythmics), due to the higher systemic exposure with respect to healthy subjects.

6. ADVERSE EFFECTS
Most commonly reported side effects are
Nausea, vomiting, abdominal pain, flatulence, diarrhoea, dyspnoea, headache, dizziness, muscle spasm, rash, pruritus.

Details of contraindications, cautions, drug interactions and adverse effect listed above are not exhaustive. For further information always check with BNF www.bnf.org.uk or SPC (www.medicines.org.uk).

7. MONITORING
There are no specific drug monitoring requirements.

Response to treatment will be reviewed by specialist team at follow up appointment, 6 months after initiation.

8. INFORMATION TO PATIENT
Patients should be informed of risks and benefits of treatment and expected follow up by specialist team.

Patients should be informed that despite the negligible absorption of the drug (less than 1%), like all rifamycin derivatives, rifaximin may cause a reddish discolouration of the urine.

APPROVAL PROCESS FOR GUIDELINE

| Written by: | Marie Miller, Interface Pharmacist, HEY |
| Consultation process: | Gastroenterology Specialist team, HEY |
| Approved by: | MMIG Nov 2015 |
| Ratified by: | HERPC Nov 15 Updated June 2018 |
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