PREVENTING TB

3HP is a combination of 2 drugs, rifapentine and isoniazid, which are taken for 3 months to get rid of latent TB infection. People who become infected with TB germs, but do not feel sick, have latent TB infection (LTBI).
What is 3HP?

3HP is a short-course Tuberculosis Preventive Treatment (TPT) regimen which is endorsed by the WHO. It combines high dose Isoniazid (H) and high dose Rifapentine (P) once weekly for three months. 3HP is associated with significantly lower liver toxicity and higher rates of treatment completion than isoniazid only treatment.

Is treatment of TB infection effective?

Strong evidence shows that the treatment of LTBI (with isoniazid monotherapy 3HP, and other regimens) is effective in preventing progression to active disease in adults and children.

3HP and Malaria

Artemisinin-based combination therapies (ACTs) given for 3 days are recommended by WHO as the first-line treatment for uncomplicated P. falciparum malaria in all adults and children. Rifampicin is known to interact with antimalarials and reduce their effectiveness. The rifapentine contained in the 3HP regimen can have the same effect. However, it is difficult to predict what this effect would be when used intermittently (weekly).

In the absence of specific information regarding 3HP and anti-malarials, the only guidance that can be offered currently is:

- If a patient is diagnosed with malaria but is not yet on TPT, decisions regarding 3HP initiation should be delayed until the episode of malaria has resolved.
- If a patient is diagnosed with malaria while on 3HP, the patient should be treated for malaria and clinically monitored according to national guidelines to ensure that the malaria is cured. At this stage, there is insufficient evidence to indicate that doses need to be adjusted.
- If a patient has malaria recrudescence while on 3HP, and the patient should be retreated for malaria according to national guidelines. The 3HP regimen should be withheld only if the new treatment also includes a drug with known interactions with rifamycins. In that case, 3HP can be restarted once the episode of malaria is resolved.
- If a patient meets diagnostic criteria for severe malaria (impaired consciousness, low blood glucose, high bilirubin/jaundice, bleeding, anemia, kidney failure and parasitemia >10%) while on 3HP, the 3HP regimen should be withheld and the patient should be urgently treated according to national guidelines. 3HP should be recommenced only once the episode of malaria is fully resolved.

Other recommendations

Malaria due to Plasmodium vivax and ovale have a different treatment regimen. However, it is likely that drugs such as primaquine and tafenaquine, used for treatment in these subsets, would also have an interaction with RPT. Sound clinical judgment should be used when co-administering these drugs with 3HP.