Latent TB treatment with Rifapentine and INH in Stockholm

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No conflict of interest

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Rifapentine/INH 12 weeks

- Rifapentine (Priftin) as effective as rifampicin but 5 times longer half-life

- As effective as INH 9 months, but higher completion rates (*NEJM. 2011; 365: 2155-66)*

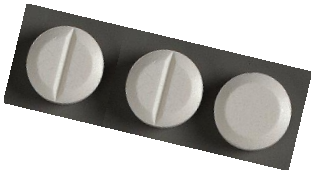
- The Prevent study: comparing systemic drug reactions (SDRs) with 3 HP to 9H: among 7552 persons who received ≥1 dose of study drug, 153 had an SDR: 138/3893 (3.5%) with 3HP vs 15/ 3659 (0.4%) with 9H (P < .001) (*Sterling et al CID 2015;61:527-535)*

- In the 3HP arm, 87 (63%) had flu-like syndrome and 23 (17%) had cutaneous reactions; 13/3893 (0.3%) had severe reactions (6 were hypotensive) and 6 reported syncope. Symptoms occurred after a median of 3 doses, and 4 hours after the dose; median time to resolution was 24 hours. There were no deaths.

- SDRs were more common with 3HP, and mostly flu-like. Persons of white race, female sex, older age, and lower BMI were independent risk factors.

Dosage and Administration

- Approved by the Swedish Medical Products Agency as a licensed drug



- Contraindications:
  - Previous severe adverse reactions to INH or RIF
  - Pathologic liver-, kidney- or blood values
  - Pregnancy or breast-feeding

- INH 15 mg/kg rounded up to the nearest 50 or 100 mg; Maximum 900 mg

- Rifapentine
  - 10.0–14.0 kg 300 mg
  - 14.1–25.0 kg 450 mg
  - 25.1–32.0 kg 600 mg
  - 32.1–49.9 kg 750 mg
  - ≥50.0 kg 900 mg maximum

- Given by DOT once weekly for 12 weeks, intake with fat-containing food-

Rifapentine and INH at the TB center Karolinska

- 29 have initiated treatment -20 patients have completed, 5 still ongoing without adverse effects ((estimated adherence 86% (25/29)).

- 4 had tried other LTBI treatment previously but discontinued,1 due to poor adherence and 3 due to adverse effects (not perceived as severe)

- Age distribution: 17-44 years (median 21)
- 10 female, 19 men

- Origin: 10 Somalia, 5 Eritrea, 3 Afghanistan, 3 Sweden, others

- Treatment indication:
  - 16 asylum seekers
  - 6 new arrivals

  } from TB high endemic country

  - 5 contact investigation
  - 1 young age, 1 pregnancy screening

- 3/29 (10%) patients have discontinued due to adverse effects (kidney failure, nausea, rash)

	Age	Gender	Origin	Indication	Adverse effects	Liver values	Completion
1	17	m	Sweden/ Somalia	Young age	None	Normal	Yes
2	17	f	Azerbajdzjan	Asylum seeker	None	Normal	Yes
3	18	m	Kongo	New arrival	None	Normal	Yes
4	18	m	Eritrea	Asylum seeker	Dose 1 dizziness, headache	Normal	Yes
5	18	m	Eritrea	Asylum seeker	None	Normal	Yes
6	18	m	Somalia	New arrival	Rash	Normal	Yes
7	18	m	Afghanistan	Asylum seeker	None	Normal	Ongoing
8	18	m	Afghanistan	Asylum seeker	Dose 1 nausea	Normal	Ongoing
9	18	m	Filippines	New arrival	None	Normal	Yes
10	19	f	Somalia	Asylum seeker	Dose 1-2 muscle pain and nausea, dose 11 headache	Normal	Yes
11	19	m	Somalia	Asylum seeker	Stomach pain once	Normal	Yes
12	20	m	Somalia	Asylum seeker	Dose 1 kidney failure, dialysis (previous RIF reaction)	Slightly raised	Discontinued after dose 1
13	20	f	Somalia	Asylum seeker	Slight dizziness 1-2 d after dose	Normal	Yes
14	20	m	Eritrea	New arrival	None	Normal	Ongoing
15	21	m	Afghanistan	Asylum seeker	Dose 1 stomach ache	Normal	Yes
16	21	f	Kongo	New arrival	Dose 1 dizziness	Normal	Ongoing
17	23	m	Eritrea	Asylum seeker	None	Normal	Yes
18	24	m	Iran	Asylum seeker	None	Normal	Yes
19	24	m	Irak	Asylum seeker	Gastritis after dose twice	ALT max 1,58	Yes
20	25	m	Somalia	Asylum seeker	None	Normal	Ongoing
21	27	f	Somalia	Asylum seeker	Dose 9 stomach pain	Normal	Yes
22	27	m	Somalia	Asylum seeker	Dose 1-2 insomnia, Dose 9 and 11 headache	Normal	Yes
23	28	m	Sweden	Contact investigation	Dizziness, nausea, stomach and joint pain	Normal	Yes
24	30	k	Kongo	New arrival	Dose 4 dizziness	Normal	Yes
25	30	f	Ghana	Previous pregnancy	Dose 1-12 nausea and vomiting	Normal	Yes
26	32	f	Somalia	Contact investigation	Dose 1 headache, nausea, vomiting	NA	Discontinued after dose 1
27	37	f	Sweden	Contact investigation	Dose 3 fluelike symptoms, insomnia, nausea .	ALT max 1,17	Yes
28	38	m	Eritrea	Contact investigation	Dose 1 headache, dizziness, nausae, tiredness, dose 4-5 diarrhea	Normal	Yes
29	44	f	Eritrea	Contact investigation	Dose 1-4 mild urticaria, dos 5 severe urticaria	Normal	Discontinued after dose 5

Problems and solutions DOT and adherence

1 patient lived 80 kilometers outside Stockholm, received treatment with DOT at primary health care unit

1 patient lived 20 km from Karolinska, DOT every other week and remaining doses at home with telephone contact.

1 patient ”disappeared " for 3 weeks but returned and completed treatment

1 patient often forgot to come at appointed visits and had to be reminded

1 patient could not come after dose 10 and took remaining doses at home

Priftin delivery problems during a limited period, clinic routine is now to order a complete 12 week treatment for every patient before start-up.