Federal Ministry of Health

Rheumatic Heart Disease Prevention Protocol

Manual 1
Primary Prevention for Physicians
Protocol for Management of Bacterial Pharyngitis

- Sore throat in the absence of runny nose and cough in patients 4-18 years is assumed to be bacterial pharyngitis.

### Clinical Diagnosis of Bacterial Pharyngitis in Primary Health Care

1. Sore throat  
2. 4-18 years old patient  
3. No runny nose or cough

### Treatment of Bacterial Pharyngitis:

**ONE INJECTION of benzathine penicillin:**  
- 600,000 IU for less than 7 years old  
- 1.2 million units if more than 7 years old  
(see below dose and precautions)

- If patients are allergic to penicillin give erythromycin (see dose below)
- Oral antibiotics; ONLY IF THERE IS A CONTRAINDICATION OR SENSITIVITY TO PENICILLIN oral penicillin or amoxicillin for 10 WHOL DAYS.

Educate the family members about sore throat and the need to give benzathine penicillin

Refer patients to secondary care if there is:

1. Arthritis or severe arthralgia (prevent the patient from walking)
2. Palpitations
3. Shortness of breathing
4. Heart murmur
5. Chorea

In patients diagnosed acute Rheumatic Fever:
1. Instruct the family to give benzathine penicillin 3 weekly:
   - Up to 25 years of age if no rheumatic heart disease
   - FOR LIFE if there is rheumatic heart disease
2. Good dental hygiene.

Continue benzathine penicillin3 weekly up to 25 years of age (if no carditis) and for life (if there is rheumatic HD)
Appendix:

How to give Benzathine Penicillin

The Penicillin Kit

Penicillin vial
Lidocaine
Antihistamine
Adrenaline
2 needles (one for sensitivity test one for injection)
10 ml syringe

1. Ask about history of penicillin allergy
2. If there is history of penicillin allergy do a Prick skin test

Prick skin test

- Dilute one vial in 10 ml distilled water
- Take 0.1 ml and add 10 ml to it (penicillin diluted 100 times)
- Scratch the skin with 0.1 ml of this solution
- Wait for 20 minutes
- Positive test: redness, wheal or itching

- If prick test is positive: Don’t give penicillin
- Dose: >7 years: 1.2 million units
- <7 years: 600 000 units
- If prick test is negative: do an intradermal sensitivity test.

Intradermal Skin Test
Has to be done before each injection
1. Dilute penicillin (1.2 million units) in 10 ml distilled water

2. Inject 0.2 ml intradermally to form 2-3 mm wheal

3. Wait for 20 minutes

4. Positive test: wheal 5 mm or more with redness, itching

   NEVER GIVE INJECTION IN PATIENTS WITH POSITIVE TEST

   NO SENSITIVITY: GIVE INJECTION DEEP IN GLUTEAL MUSCLE

   Penicillin can be diluted in lidocaine to decrease pain

In case of penicillin sensitivity:

**Erythromycin** BD for 10 days (for treatment) and for the duration of secondary prophylaxis

**Dose:**

Less than 7 years: 250 mg BD for 10 days (for treatment) and for the duration of secondary prophylaxis

More than 7 years: 500 mg BD for 10 days (for treatment) and for the duration of secondary prophylaxis.
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