STANDARD OPERATING PROCEDURE

Diagnosis and Management of Acute Rheumatic Fever

Special Region (1) — Union of Myanmar

Version: 1.0

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Approved by: Internal Medicine Unit, SR-1

1. Purpose

To provide a standardized, evidence-based, and resource-adapted approach for the diagnosis, treatment, and secondary prevention of Acute Rheumatic Fever in healthcare facilities within Special Region (1).

2. Scope

- OPD / IPD / Emergency
- Adult patients
- Primary and secondary care hospitals in SR-1

3. Definition

Acute Rheumatic Fever is an immune-mediated sequela of Group A Streptococcal pharyngitis affecting the heart, joints, brain, and skin.

4. Diagnosis (Jones Criteria)

Diagnosis requires either:

- 2 Major criteria, **OR**
- 1 Major + 2 Minor criteria

PLUS evidence of recent streptococcal infection.

Category	Criteria
Major Criteria	Carditis
	Migratory polyarthritis
	Sydenham chorea
	Erythema marginatum
	Subcutaneous nodules

Minor Criteria	Fever
	Arthralgia
	Elevated ESR / CRP
	Prolonged PR interval
Evidence of Streptococcal Infection	ASO titre
	Anti-DNase B
	Throat culture
	Rapid antigen test

5. Management

5.1 Initial Treatment

- Benzathine Penicillin G IM single dose
- Aspirin for arthritis
- Steroids for carditis (Prednisolone 1–2 mg/kg/day)
- Treat heart failure if present
- Chorea: Haloperidol or Valproate if severe

5.2 Medication Regimens

Drug	Indication	Dose (Adult)	Dose (Children)	Duration	Notes
Benzathine Penicillin G (BPG)	Eradication of GAS	1.2 million units IM single dose	600,000 units IM (<27 kg); 1.2 million units (≥27 kg)	Single dose	First-line; ensures compliance
Aspirin	Arthritis / inflammation	4–6 g/day (divided 4–5 doses)	60–80 mg/kg/day (divided)	2–4 weeks (then taper)	Monitor for GI toxicity, salicylate toxicity

Prednisolone	Moderate–severe carditis	1–2 mg/kg/day (max 60 mg)	1–2 mg/kg/day	2–3 weeks full dose	Switch to aspirin after taper

5.3 Steroid Tapering Protocol

Week	Dose
Week 1–2	Full dose (1–2 mg/kg/day)
Week 3	75% of initial dose
Week 4	50% of initial dose
Week 5	25% of initial dose
Week 6	Stop

6. Secondary Prophylaxis

Benzathine Penicillin G every 3–4 weeks.

Duration of Prophylaxis

Clinical Scenario	Duration
No carditis	5 years or until 21 years of age
Carditis (no residual disease)	10 years or until 21 years of age
Residual valve disease	≥10 years or until 40 years (often lifelong)

7. Follow-Up

- Regular clinical review
- Echocardiography if available
- Ensure adherence to prophylaxis regimen

8. Complications

- Rheumatic heart disease
- Heart failure
- Recurrence of acute rheumatic fever

9. References

1. Gewitz MH, et al. Revision of the Jones Criteria for the diagnosis of acute rheumatic fever in the era of Doppler echocardiography. *Circulation*. 2015;131(20):1806–1818.
2. World Health Organization. Rheumatic fever and rheumatic heart disease: report of a WHO expert consultation. WHO. 2023.
3. World Heart Federation. Guidelines for the echocardiographic diagnosis of rheumatic heart disease. WHF. 2023.
4. Carapetis JR, et al. Acute rheumatic fever. *Lancet*. 2016;392(10142):161–174.
5. RHD Australia (ARF/RHD writing group). The 2020 Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease. 3rd ed. 2020.