A 14yo female presents to your emergency department with a sore throat and a fever. Examination reveals an acutely inflamed pharynx with enlarged tonsils and prominent exudate.

List four common causes for her symptoms (2 marks):

Tonsilitis

Pharyngitis

Peritonsilar abscess

Infectious mononucleosis

The patient is discharged from your ED and returns five weeks later with bilateral hip pain and rapid involuntary movements. You suspect that the patient may have acute rheumatic fever. Your resident asks how the diagnosis of acute rheumatic fever is made.

Describe the criteria used to confirm a diagnosis of acute rheumatic fever (10 marks):

Modified Jones Criteria for the diagnosis of ARF

* 2 major or 1 major/2 minor AND evidence of preceding strep infection

MAJOR

* Carditis
* Chorea
* Subcutaneous nodules
* Polyarthritis
* Erythema marginatum

MINOR

* Fever > 38 (or 38.5 in low risk populations)
* Arthralgia
* History of rheumatic fever
* ESR > 30 / CRP > 30 (double for low risk populations)
* Prolonged PR interval

Outline your acute management of this patient (5 marks):

Antibiotics – IM benzathine penicillin (900mg/450mg), then oral phenoxymethylpenicillin for 10 days (500mg/250mg), or erythromycin if penicillin allergic (20mg/kg BD up to 800mg)

Carditis – reduced activity, treat cardiac failure (e.g. diuresis/fluid restriction/ACEi), give digoxin for AF, consider valve surgery for severe acute valvular disease

Arthritis – NSAIDs (eg ibuprofen 30mg/kg/day up to 1600mg given TDS)

Chorea – consider carbamazepine (7-20mg/kg/day given TDS) or valproate (15-30 mg/kg/day given TDS)

Hospital admission – consider in symptomatic patients

Consider reviewing the quick reference guides from RHD Australia (www.rhdaustralia.org.au)