An Audit of Rheumatic Fever in South Wales Region

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Introduction
We carried out a retrospective case-note based audit of Rheumatic Fever in South Wales region for the past 17 years. The objective of the study was to see if the diagnosis of Rheumatic Fever was made correctly according to Jones criteria, and that the management and prophylactic antibiotic was administered appropriately.

Methods
We performed a search of ‘Rheumatic Fever’ from our computer database (Cardiobase) between the year of 1996 to 2013.

Results
31 patients met Jones criteria, with 9 patients labelled as probable Rheumatic Fever. 19 men (47%) and 21 women (53%), with a median age at diagnosis of 9 years and an incidence of 2-3 per year. The commonest Major criteria was carditis (72%), followed by chorea (45%), arthritis (35%), erythema marginatum (10%) and subcutaneous nodules (5%). Commonest Minor criteria was arthralgia (50%), followed by fever (42%), raised CRP (35%) and prolonged PR interval (12%). All 40 patients had evidence of Group A Steptococcal infection (29 with raised ASOT, 9 raised anti-DNAse and 5 with positive throat swab). Of the 29 patients with carditis, 26 had valvulitis, 4 pericarditis and 8 with dilated left heart. Only 17 patients (58%) had a clinical audible murmur. All 26 with valvulitis had Mitral valve involvement (100%), with 13 of them having both Mitral and Aortic Valve (50%) involvement. All patients received antibiotic to eradicate the infection. 31 patients who met Jones criteria had prophylactic antibiotic till at least 21 years of age, 6 of the probably Rheumatic Fever group received prophylactic antibiotic till 21 years of age, and the remaining 3 with probable Rheumatic Fever had prophylactic antibiotic for 1 year and discontinued. 14 patients received Aspirin treatment for arthritis, 3 had steroids for carditis, 7 patients needed ACE inhibitor and 4 had diuretics treatment. 1 patient unfortunately died from thrombus following complication of valve repair surgery. 3 patient received Haloperidol and 2 patients had Carbamazepine for chorea.

Conclusion
In conclusion, Rheumatic Fever is an uncommon disease but not rare, and all patients were diagnosed and managed appropriately with good long term outcome.