

Letter to the Editor

The role of echocardiography in diagnosing carditis in the setting of acute rheumatic fever

Keywords: Acquired heart disease; ultrasound; Duckett-Jones criteria

Sir,

Vijayalakshmi and her colleagues are to be commended for their paper.¹ We disagree, however, with the use of a scoring system to make an echocardiographic diagnosis of carditis due to acute rheumatic fever. We agree with the comments of Nigel Wilson in the accompanying editorial,² namely that the finding of significant mitral regurgitation in isolation, giving a score of 2 rather than the minimum of 6 in their system, should underscore the diagnosis of subclinical carditis in acute rheumatic fever. The patients described by the authors both in their recent paper,¹ and in their earlier publication in 2005,³ were surely suffering predominantly from recurrent attacks, given the extent of the valvar disease described in the paper. The valvar lesions they describe differ from those reported in patients, also from India, by Vasan and colleagues,⁴ recognising that the echocardiographic machines used by Vasan and associates were from a different technological era. It should also be noted that Caldas and colleagues,⁵ albeit working in a different continent, observed mitral regurgitation without concomitant thickening of the valve in only 3 of 11 patients with subclinical carditis.

We would suggest that a scoring system similar to that proposed by Vijayalakshmi and colleagues¹ would be more appropriate for the detection of subclinical cardiac lesions in populations known to be at high risk of rheumatic fever. The use of a standardized score would allow meaningful comparison between studies published from different areas of high prevalence, as well as an accurate

way of measuring temporal change, especially if a population-based intervention, such as aggressive treatment of sore throats, were to be tested over a decade or more.

We would also recommend that an attempt should be made to use the highest frequency probe possible for every patient. In our own experience, current technology allows for the use of 7 MHz probes even in thin patients aged around 10 years. Use of such probes would potentially avoid over-diagnosis of valvar thickening or nodular change. We endorse the comments of Vijayalakshmi and colleagues,¹ nonetheless, on the caveats in the use of harmonic imaging, particularly with the default setting of high-end machines, since we agree that it can be easy to over-diagnose valvar thickness if this modality is selected during a study.

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Accepted for publication 15 March 2009