# Letter to Editor

# Anticoagulation for Atrial Fibrillation after Resolution of Dengue Haemorrhagic Fever

Internal Medicine Section

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# Dear Sir,

In a recent publication, Pahadiya et al., presented a young patient with atrial fibrillation (AF) during dengue haemorrhagic fever, suggesting the role of acute viral myocarditis [1]. In this interesting case report, the patient was admitted after five days of dengue symptoms. The cardiac arrhythmia was observed in the 3<sup>rd</sup> day of hospital admission and persisted until the 8<sup>th</sup> day, two days after the initiation of steroid therapy with dexamethasone. No specific antiarrhythmic therapy was prescribed. The patient was discharged on 12<sup>th</sup> day, clinically stable, afebrile and with normal haematological laboratory parameters. Unfortunately, despite of the excellent hospital upshot of this patient, the authors did not present his long-term follow-up neither they contemplated the anticoagulation therapy after hospital discharge, late after resolution of the acute phase.

AF is associated with the occurrence of thromboembolic complications, mainly stroke, that are preventable with anticoagulation therapy. The risk of thromboembolism for patients undergoing cardioversion of AF may reach 5% [2]. Pooled data from 32 studies of cardioversion of AF or atrial flutter suggest that 98% of clinical thromboembolic events occur within 10 days after restoration of sinus rhythm [3]. Thus, current guidelines for the management of patients with AF [4] are emphatic in recommending oral anticoagulation for at least 4 weeks after conversion of an episode of 48 hours' duration or longer, regardless of the CHA<sub>2</sub>DS<sub>2</sub>-VASc score for thromboembolism.

During the acute phase of haemorragic dengue fever, there is no statement regarding the management of anticoagulation in patients with indication for this therapy, but it seems reasonable the avoidance of any antithrombotic drugs in these days. However,

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after a good resolution of the acute phase of the infection, those patients must be considered for anticoagulation if their arrhythmia had lasted for more than 48 hours.

In our first report of the association of AF with haemorrhagic dengue fever, the patient had the sinus rhythm restored in 24 hours with amiodarone infusion [5]. He did not receive oral anticoagulation due to the short duration of AF.

In the case of Pahadiya et al., the episode of atrial fibrillation lasted for 5 days [1]. The decision for anticoagulation in this patient is difficult. However, I do believe that this therapy should have been initiated

Finally, I would like to state that, in our first report of atrial fibrillation due to dengue haemorrhagic fever [5], we had not mentioned some role for steroid therapy, as it was referred in the discussion of Pahadiya et al., [1].

# REFERENCES

- [1] Pahadiya HR, Parmar V, Kumar H, Sagar A. Atrial fibrillation due to acute myocarditis during dengue haemorrhagic fever. *J Clin Diagn Res.* 2015;9:OL1-2.
- [2] Naccarelli GV, Dell'Orfano JT, Wolbrette DL, et al. Cost-effective management of acute atrial fibrillation: role of rate control, spontaneous conversion, medical and direct current cardioversion, transesophageal echocardiography, and antiembolic therapy. Am J Cardiol. 2000;85:36D–45D.
- [3] Berger M, Schweitzer P. Timing of thromboembolic events after electrical cardioversion of atrial fibrillation or flutter: a retrospective analysis. Am J Cardiol. 1998;82:1545–7, A8.
- [4] January CT, Wann LS, Alpert JS, et al. 2014 AHA/ACC/HRS guideline for the management of patients with atrial fibrillation: executive summary: a report of the American College of Cardiology/American Heart Association Task Force on practice guidelines and the Heart Rhythm Society. Circulation. 2014;130:2071-104.
- [5] Horta Veloso H, Ferreira JA, de Paiva JM, Honorio JF, Bellei NC, de Paola AA. Acute atrial fibrillation during dengue haemorrhagic fever. Braz J Infect Dis. 2003;7:418-22.

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