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SHORT COMMUNICATION

Racing heart and pounding neck: Classic clinical sign revisited

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Abstract The present report describes "Frog sign" due to prominent jugular pulsations in the neck. This is seen in case of paroxysmal atrioventricular nodal reentrant tachycardia.

Legend

A 38 year old male presented to the emergency department with the complaints of sudden onset of palpitations. On examination patient had regular pulse rate of 180/min. His ECG was suggestive of atrioventricular nodal reentrant tachycardia (AVNRT) (Fig. 1). On examination, prominent rapid jugular venous pulsations were also present. This is known as "frog

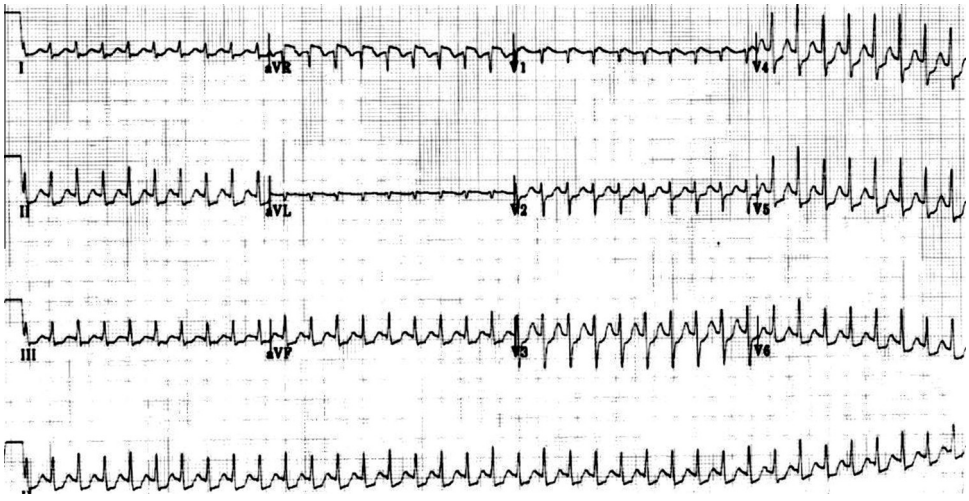

Fig. 1 Electrocardiogram showing atrio-ventricular nodal reentrant tachycardia.

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sign'' (video). Tachycardia was successfully treated with 6 mg of intravenous adenosine. Termination of tachycardia also resulted in disappearance of prominent neck pulsations.

AVNRT is the most common form of supraventricular tachycardia. ''Frog sign'' during tachycardia has been considered to be particularly helpful in making the diagnosis of typical AVNRT.[1] ''Frog sign'' is nothing but the regular cannon ''a'' waves produced by near simultaneous contractions of atria and ventricles against closed mitral and tricuspid valves. This happens because of retrograde depolarization of atria through fast AV nodal pathway.[2] This leads to fusion of A and V waves of jugular venous pulsations, which results in higher peak and mean right atrial pressures and reversal of flow in superior vena cava[2] producing rapid and regular pounding in the neck termed as ''Frog sign''. Some believe it to be practically pathognomic of AVNRT. A knowledge of these classic signs is often helpful in suggesting the underlying condition.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.ehj.2015.04.001.

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