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Please note: The authors have reported that they have no relationships relevant to the contents of this paper to disclose.

REFERENCES

1. Emdin CA, Anderson SG, Woodward M, Rahimi K. Usual blood pressure and risk of new-onset diabetes: evidence from 4.1 million adults and a meta-analysis of prospective studies. J Am Coll Cardiol 2015;66:1552–62.

2. Lillioja S, Mott DM, Spraul M, et al. Insulin resistance and insulin secretory dysfunction as precursors of non-insulin-dependent diabetes mellitus. Prospective studies of Pima Indians. N Engl J Med 1993;329:1988–92.

3. Reaven G. Insulin resistance, hypertension, and coronary heart disease. J Clin Hypertens 2003;5:269–74.

4. Reaven GM. Relationships among insulin resistance, type 2 diabetes, essential hypertension, and cardiovascular disease: similarities and differences. J Clin Hypertens 2011;13:238–43.

5. Lima NK, Abbasi F, Lamendola C, Reaven GM. Prevalence of insulin resistance and related risk factors for cardiovascular disease in patients with essential hypertension. Am J Hypertens 2009;22:106–11.

Search for Evidence-Based Medicine for Brugada Syndrome

The paper by Nademanee et al. (1) is so excellent—it demonstrated that the proposed diagnosis of idiopathic origin for the so-called Brugada syndrome must be dismissed.

There are 2 minor criticisms: one is that not one of the patients submitted to necropsy had an electrocardiogram (ECG) performed during life, so it is possibly but not definitely sure that they have the complete phenotypic traits. It is also confusing why, because this lethal syndrome has been proposed to be the "mother" of a relevant number of sudden deaths, it has been so difficult to perform detailed necropsy studies in patients who have died because of the syndrome, and why those published have been so rarely discussed (see Table 1 of Martini et al. [2]).

As a second comment, I find it unfair in this paper that the humble but first discoverer of the syndrome (and its underlying structural abnormalities), Professor Andrea Nava from Padova, was not even cited. Nava described the complete syndrome in 1987/1998 (1–3) and by a simple analysis of the ECG demonstrated that the ECG pattern was due to a right ventricular conduction disturbance linked to a structural abnormality of the right ventricle. These evidence-based theories received a lot of heavy criticism (and other unfair definitions and boycott), because experts have insisted the syndrome was idiopathic, linked to ion channel abnormalities in a totally normal heart. The unjustified abuse of this non-evidence-based assumption has led to devastating (and high-cost) therapy in asymptomatic and healthy young people (4), which could have been avoided if the structural heart abnormalities underlying the true patients described 30 years ago had been heeded, and not the functional phantoms and the genetic purgatory had been investigated (5). I hope that starting from now efforts will be made to improve the knowledge of what is evidence based rather than to search different confusing pathways that slow the correct identification and risk stratification of the syndrome and its underlying disease.

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REFERENCES

1. Nademanee K, Raju H, de Noronha SV, et al. Fibrosis, Connexin-43, and conduction abnormalities in the Brugada syndrome. J Am Coll Cardiol 2015;66:1976–86.

2. Martini B, Wu J, Nava A. A rare lethal syndrome in search of its identity: sudden death, right bundle branch block and ST segment elevation. In: Wu J, Wu J, editors. Sudden death: causes, risk factors and prevention. Tampa, FL: Nova Biomedical, 2013:2–39.

3. Nava A, Canciani B, Martini B, et al. La repolarisation precoce dans le precordiales droites: trouble de la conduction intraventriculaire droite? Correlations de l'electrocardiographie- vectorcardiographie avec l'electrophysiologie. Mises a Jour Cardiologiques 1988;17:157–9.

4. Martini B, Nava A, Thiene G, et al. Ventricular fibrillation without apparent heart disease: description of six cases. Am Heart J 1989;118:1203–9.

5. Ackerman MJ. Genetic purgatory and the cardiac channelopathies: exposing the variants of uncertain/unknown significance issue. Heart Rhythm 2015;12:2325–31.

The Complex Network of the Brugada Syndrome

I read the paper by Nademanee et al. (1) with great interest and congratulate the authors on their excellent work. As the authors correctly state, Brugada