



Therapeutic strategy for those with atrioventricular block and cardiac sarcoidosis

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Received: 22 May 2022 / Accepted: 29 June 2022 / Published online: 8 July 2022
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Keywords Heart failure · Cardiomyopathy · Arrhythmia · Steroid

To editor

Atrioventricular block (AVB) is one of the major and critical comorbidities of cardiac sarcoidosis [1]. Yodogawa and colleagues experienced ten patients with a variety of degrees of AVB due to cardiac sarcoidosis [2]. The second-degree AVB was ameliorated by steroid therapy without pacemaker implantation, whereas those with third-degree AVB required pacemaker implantation prior to steroid therapy. The authors concluded that steroid therapy might be a feasible and effective therapeutic strategy to avoid pacemaker implantation in patients with cardiac sarcoidosis presenting second-degree AVB. Several concerns have been raised.

In general, asymptomatic second-degree AVB does not indicate pacemaker implantation given its reversibility [1]. In their study, two patients with second-degree AVB received steroid therapy, instead of pacemaker implantation [2]. Such a strategy might not be so surprising because they do not indicate pacemaker. Nevertheless, they seem to have slight symptoms such as shortness of breath on exertion. How do the authors consider the indication of pacemaker implantation for them?

In their study, the second-degree AVB ameliorated following the initiation of steroid therapy [2]. Given that such a type of AVB has reversibility, the efficacy of steroid therapy in improving second-degree AVB remains uncertain. A control group with second-degree AVB who does not receive steroid therapy would be required to validate their hypothesis.

Detailed therapeutic strategy for those with second-degree AVB and cardiac sarcoidosis remains unclear [2]. Of note, how do the patients with symptomatic AVB wait during the steroid therapy? Do they receive temporary pacemakers for days or weeks until steroid therapy gets effective? If the steroid therapy fails to improve AVB, patients should receive pacemaker implantation with incremental risk of infection.

Declarations

Conflict of interest The authors declare that they have no conflict of interests.

References

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2. Yodogawa K, Fujimoto Y, Hagiwara K, Oka E, Hayashi H, Murata H, Yamamoto T, Iwasaki Y, Shimizu W (2022) Possibility of steroid therapy without pacemaker implantation in patients with sarcoidosis presenting atrioventricular block. *Heart Vessel*. <https://doi.org/10.1007/s00380-022-02092-1>

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