International Journal of Cardiology 294 (2019) 39

Contents lists available at ScienceDirect

International Journal of Cardiology

journal homepage: www.elsevier.com/locate/ijcard

Correspondence

Association between ankylosing spondylitis and atrial fibrillation

Shih-Wei Lai *

College of Medicine, China Medical University, Taichung 404, Taiwan
Department of Family Medicine, China Medical University Hospital, Taichung 404, Taiwan

ARTICLE INFO

Article history:
Received 6 June 2019
Accepted 18 June 2019

The association between ankylosing spondylitis and other comorbidities has been well studied [1,2]. Recently a cohort study conducted by Moon et al. illustrated that persons with ankylosing spondylitis were at risk of new onset of atrial fibrillation (hazard ratio 1.28; 95% confidence interval 1.03–1.58) [3]. Some points are discussed. First, the incidence of atrial fibrillation was 1.54-fold higher in persons with ankylosing spondylitis than those without ankylosing spondylitis in Moon et al.'s study (23.2 vs. 15.1 per 10,000 person-years) [3]. The attributable risk caused by ankylosing spondylitis was 8.1 per 10,000 person-years. Removal of ankylosing spondylitis may reduce 8 cases of new onset of atrial fibrillation per 10,000 person-years of follow-up. Second, Another cohort study illustrated that the incidence of chronic obstructive pulmonary disease was 1.45-fold higher in persons with ankylosing spondylitis than those without ankylosing spondylitis (4.47 versus 3.09 per 10,000 person-years) [4]. The attributable risk caused by ankylosing spondylitis was 1.38 per 10,000 person-years. Removal of ankylosing spondylitis may reduce 1 case of chronic obstructive pulmonary disease per 10,000 person-years of follow-up. Third, based on the above measurement, ankylosing spondylitis has a 8-fold greater impact on the risk of atrial fibrillation than the risk of chronic obstructive pulmonary disease. Ankylosing spondylitis is not likely to be eradicated currently. From a view of primary prevention, quitting smoke can reduce the risk of developing chronic obstructive pulmonary disease. I agree with Moon et al.'s comments that physicians should take into consideration regular screening for atrial fibrillation and stroke prevention in persons with ankylosing spondylitis.

Conflicts of interest

Guarantor of the article: Shih-Wei Lai, MD.

Specific author contributions: Shih-Wei Lai contributed to the conception of the article, initiated the draft of the article, and has approved the final draft submitted.

Financial support: None.

Potential competing interests: None.

References

[1] H.H. Chen, S.Y. Yeh, H.Y. Chen, C.L. Lin, F.C. Sung, C.H. Kao, Ankylosing spondylitis and other inflammatory spondyloarthritis increase the risk of developing type 2 diabetes in an Asian population, Rheumatol. Int. 34 (2014) 265–270.
[2] L.M. Sun, C.H. Muo, J.A. Liang, S.N. Chang, F.C. Sung, C.H. Kao, Increased risk of cancer for patients with ankylosing spondylitis: a nationwide population-based retrospective cohort study, Scand. J. Rheumatol. 43 (2014) 301–306.
[3] I. Moon, E.K. Choi, J.H. Jung, K.D. Han, Y.J. Choi, J. Park, et al., Ankylosing spondylitis: a novel risk factor for atrial fibrillation - a nationwide population-based study, Int. J. Cardiol. 275 (2019) 77–82.
[4] S.W. Lai, C.L. Lin, Association between ankylosing spondylitis and chronic obstructive pulmonary disease in Taiwan, Eur. J. Intern. Med. 57 (2018) e28–e29.

* Department of Family Medicine, China Medical University Hospital, No 2, Yu-De Road, Taichung City 404, Taiwan.
E-mail address: wei@mail.cmuh.org.tw.

https://doi.org/10.1016/j.ijcard.2019.06.050
0167-5273/