European Review for Medical and Pharmacological Sciences

2015; 19: 184



Third dimension refines sensitivity

Dear Editor,

We read the article of Terzano et al entitled "Atrial fibrillation in the acute, hypercapnic exacerbations of COPD" with great interest¹. The authors evaluated the correlation between pulmonary hypertension and pulmonary functions and the role of hypercapnia in the development of atrial fibrillation, in patients attending to the hospital with COPD exacerbation. As a result of the study, an independent correlation between the factors mentioned above and the development of atrial fibrillation was found. The study is noteworthy with regards to its design and sample size. Nevertheless, it has some aspects awaiting answers. First, the authors have evaluated atria with single-plane area measurement. Although this evaluation is not wrong, guidelines have recommendations stating that determination of heart chambers in terms of volumes in trials is more convenient and appropriate². For this reason, it would have been more valuable to have atrial volumes in this research. Another question mark regarding the atricle is that recent guidelines point obstructive sleep apnea syndrome (OSAS) as a popular reason for the development of atrial fibrillation³. Defined as an overlap syndrome, the co-existence of OSAS and COPD is seen in clinical practice⁴. The authors have mentioned shortly about this phenomenon in discussion. However, there is no data whether the patients composing AF+COPD group in the study have OSAS or not. Moreover, the risk of development of atrial fibrillation during COPD exacerbation might be higher than that of patients with OSAS. That is why, we think the patient population should be scrutinized in terms of OSAS in the methodology part of the study.

In conclusion, I congratulate the authors for this original research, and hope it to pioneer more studies like this.

Conflict of Interest

The Authors declare that they have no conflict of interests.

References

- 1) TERZANO C, ROMANI S, CONTI V, PAONE G, ORIOLO F, VITARELLI A. Atrial fibrillation in the acute, hypercapnic exacerbations of COPD. Eur Rev Med Pharmacol Sci 2014; 18: 2908-2917.
- 2) LANG RM, BIERIG M, DEVEREUX RB, FLACHSKAMPF FA, FOSTER E, PELLIKKA PA, PICARD MH, ROMAN MJ, SEWARD J, SHANEWISE JS, SOLOMON SD, SPENCER KT, SUTTON MS, STEWART WJ; CHAMBER QUANTIFICATION WRITING GROUP; AMERICAN SOCIETY OF ECHOCARDIOGRAPHY'S GUIDELINES AND STANDARDS COMMITTEE; EUROPEAN ASSOCIATION OF ECHOCARDIOGRAPHY. Recommendations for chamber quantification: a report from the American Society of Echocardiography's Guidelines and Standards Committee and the Chamber Quantification Writing Group, developed in conjunction with the European Association of Echocardiography, a branch of the European Society of Cardiology. J Am Soc Echocardiogr 2005; 18: 1440-1463.
- 3) EUROPEAN HEART RHYTHM ASSOCIATION; EUROPEAN ASSOCIATION FOR CARDIO THORACIC SURGERY, CAMM AJ, KIRCHHOF P, LIP GY, SCHOTTEN U, SAVELIEVA I, ERNST S, VAN GELDER IC, AL-ATTAR N, HINDRICKS G, PRENDERGAST B, HEIDBUCHEL H, ALFIERI O, ANGELINI A, ATAR D, COLONNA P, DE CATERINA R, DE SUTTER J, GOETTE A, GORENEK B, HELDAL M, HOHLOSER SH, KOLH P, LE HEUZEY JY, PONIKOWSKI P, RUTTEN FH. Guidelines for the management of atrial fibrillation: the Task Force for the Management of Atrial Fibrillation of the European Society of Cardiology (ESC). Eur Heart J 2010; 31: 2369-2429. Erratum in: Eur Heart J 2011; 32: 1172.
- 4) ZAMARRÓN C, GARCÍA PAZ V, MORETE E, DEL CAMPO MATÍAS F. Association of chronic obstructive pulmonary disease and obstructive sleep apnea consequences. Int J Chron Obstruct Pulmon Dis 2008; 3: 671-682.

O. Uz, U. Küçük, Z. Işılak, M. Dogan Department of Cardiology, Gulhane Military Medical Academy, Haydarpasa Training Hospital, Istanbul, Turkey