

Sleep apnoea management in atrial fibrillation in clinical practice: key messages for health care professionals based on a joint survey by EHRA and ACNAP

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Received 24 August 2021; accepted 31 August 2021; online publish-ahead-of-print 15 September 2021

Obstructive sleep apnoea (OSA) is highly prevalent in patients with atrial fibrillation (AF) and associated with reduced response to rhythm control strategies.¹ Current international guidelines on AF management recommend a combined risk factor management (including OSA treatment), preferably delivered within an integrated care approach.² Previously, we described the potential for a multi-disciplinary integrated approach to comprehensively manage OSA and AF,³ but the implementation of OSA testing and treatment in daily AF care remains challenging ad inconsistent.

A recent joint survey by the European Heart Rhythm Association (EHRA) and the Association of Cardiovascular Nurses and Allied Professions (ACNAP)⁴ conducted in 186 nurses, cardiologists, and other health care professionals showed sub-optimal OSA management in AF patients. According to these professionals, OSA-related symptoms were ranked as the most important reason to test for OSA in AF patients. The majority of participants (67.7%) indicated that cardiologists perform 'ad hoc' referrals to sleep centres for OSA screening. Only 11.3% of respondents initiated systematic testing by a home sleep test or respiratory polygraphy, and 10.8% indicated to have a structured OSA assessment pathway in place at the cardiology department. Only 6.7% of the respondents indicated that they test >70% of their AF patients for OSA as a component of rhythm control therapy. Additionally, this survey identified various knowledge gaps and structural barriers currently preventing optimal implementation, which includes (i) the absence of an established collaboration between cardiology and sleep clinic (35.6%); (ii) the lack of skills and knowledge (23.6%); (iii) the lack of financial (23.6%) and workforcerelated resources (21.3%). All these factors result in the fact that structured testing for OSA only occurs in the minority of AF patients.

Education of patients and health care professionals is crucial. In the joint survey by EHRA and ACNAP,⁴ lack in skills and knowledge related to OSA management has been identified as a barrier currently preventing structured implementation in the clinic. There is an urgent need for increased awareness and structured pathways to standardize OSA testing and treatment integration in the management of AF. Current international cardiology societies mainly focus on treatment recommendations in their AF guidelines. However, an interdisciplinary practice guide, providing hands-on instructions and guidance to implement and disseminate integrated OSA and AF management in clinical practice is not available yet. In addition to traditional communication media such as manuscripts and editorials published in journals, also social media, and in particular Twitter, has emerged as the leading and most widely used communication channel for science dissemination and professional exchanges.⁵ Twitter is now regularly used by the European Society of Cardiology (ESC) to communicate about activities during conferences, with the appointment of dedicated Twitter ambassadors, and promote scientific content of the associated journals, which may be also important to disseminate approaches on why and how to test and manage OSA in AF patients.

Increased awareness of OSA will then hopefully benefit patients and a comprehensive AF management approach implemented in clinical practice. A patient-centred approach with a focus on engagement and education of patients with AF will allow clarification of the role of OSA management as part of AF treatment. This also may lead to an

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informed decision towards the management of OSA and the planned AF ablation procedure and supports agreement of the patient to undergo related diagnostics and improved adherence, if treatment is required. It has been shown that multi-disciplinary teams are suitable to provide such comprehensive approach.⁶

Despite specific recommendations in current AF management guidelines, practices in AF outpatient clinics lack structured assessment of cardiovascular risk factors, including OSA. Therefore, a call for action to redesign and reform healthcare and to reduce fragmentation and improve collaboration is needed. Integrated care is an approach that can contribute to this. It consists of four indispensable fundamentals: (i) a patient-centred approach, with the active involvement of the patient in their care pathway, providing education and empowerment to undertake self-management; (ii) comprehensive treatment which goes beyond the management of AF alone, including stroke risk assessment and appropriate application of oral anticoagulation, assessment and treatment of underlying conditions, risk factors and lifestyle modification; (iii) delivered by a multidisciplinary team consisting of cardiologists, nurses, allied health professionals, sleep specialists, general practitioners, amongst others, and (iv) the use of technology to support this integrated approach.² Besides the potential impact on care delivery and outcomes, such approaches provide important opportunities for the role of nurses and allied professionals⁷ and can improve guideline adherence⁸ and reduce hospitalization and mortality in AF outpatient populations.⁹ Although the modus of delivery and setting may play a significant role in achieving these outcomes, evidence suggests the need for integrated models of care, incorporating all four fundamentals, in reducing the burden of cardiovascular disease.¹⁰

Finally, future randomized trials establishing OSA as an independent modifiable risk factor for AF are needed. Large research projects mainly focusing on feasibility and increasing awareness of OSA may contribute to the dissemination and implementation of comprehensive OSA management in a clinical setting. Implementation projects such as the TeleCheck-AF approach (an on-demand mHealth intervention to remotely measure heart rate and rhythm in patients with AF) is an example of rapid implementation of novel infrastructure in clinical practice.¹¹ However, given that the time between traditional study conception and dissemination of findings generally takes long, the flash mob design¹² may be suitable to attract a large number of health care professionals, interested in the topic, and able to collect valuable data.

This may help to further refine OSA screening and management approaches with a high generalizability.

Conflict of interest: none declared.

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