

Screening for sleep-disordered breathing is recommended in patients with chronic heart failure

To the Editors:

In a recent editorial in the *European Respiratory Journal*, K.A. Franklin criticised the screening of heart failure patients for sleep-disordered breathing (SDB) [1]. The major concern was that, to date, no beneficial effect on overall prognosis has been shown for any therapeutic option, e.g. nocturnal oxygen, continuous positive airway pressure (CPAP) or adaptive servoventilation (ASV).

The Canadian Continuous Positive Airway Pressure for Patients with Central Sleep Apnea and Heart Failure (CANPAP) trial was the first study to assess the effect of CPAP therapy in patients with chronic heart failure (CHF) and predominantly central sleep apnoea (CSA) on mortality [2]. Unfortunately, this study failed to demonstrate a prognostic benefit. However, there is ongoing debate as to how to interpret the CANPAP trial results, but there might be a consensus that CPAP cannot be recommended for all CHF patients with CSA as performed in this trial. There is no question that more evidence is needed as to how to treat SDB in patients with CHF. Several small studies have shown beneficial effects of oxygen, CPAP or ASV on parameters of SDB and/or CHF, but studies on mortality are pending. It seems likely that therapeutic approaches should be tailored to different types and severities of SDB (obstructive, central or mixed), and results may be dependent upon SDB and CHF severity.

Recently published studies have confirmed a high prevalence of SDB in patients with CHF treated according to current guidelines [3, 4]. In addition, central types of SDB (periodic breathing or Cheyne–Stokes respiration) are supposed to be indicators of the severity of cardiac failure in selected patients. With worsening CHF, the number of central events increases, and sufficient heart failure therapy can improve CSA substantially [5, 6]. Moreover, it has been shown that the presence of obstructive [7], as well as central [8, 9], types of SDB are associated with an impaired prognosis and increased morbidity in these patients. In this context, the apnoea/hypopnoea index represents a strong prognostic marker of future cardiac events [10]. This implies that screening for SDB is warranted in order to identify at-risk patients and lead to intensified therapeutic efforts. Consequently, screening for SDB should be part of the routine work-up in CHF patients (such as, for example, spiroergometry) for the identification of at-risk patients and perhaps intensification of therapy.

With the availability of simplified and portable screening devices, we recommend screening for sleep-disordered breathing in every heart failure patient, and even use these devices for follow-up purposes. Diagnostic nihilism seems to be inappropriate, but studies on treatment modalities need to be performed.

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STATEMENT OF INTEREST

Statements of interest for all authors of this manuscript can be found at www.erj.ersjournals.com/misc/statements.shtml

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From the author:

I am grateful for the interest and the comments by O. Oldenburg and co-workers regarding my editorial [1].

There is no question that treatment of sleep apnoea among patients with congestive heart failure is of great interest, because sleep apnoea is common among such patients, especially in the form of central apnoea and Cheyne–Stokes