

Erectile dysfunction in COPD: A hidden co-morbidity

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COPD is associated with a number of different co-morbid conditions and, unsurprisingly, the frequency of these increases with age and disease severity. Co-morbidities can have a severe impact on the costs of healthcare, provision and resources, they can also increase the intensity of symptoms, increase mortality risk and perhaps most importantly impact on quality of life and health status.¹ Whilst some co-morbidities are well recognized and have established management and treatment, not all receive the same attention. The evidence suggests patients with COPD are at a significantly higher risk of developing erectile dysfunction (ED) compared with the general population, regardless of age and presence of other co-morbidity.² However, despite the evidence, the presence of ED is not generally sought or discussed with patients. Rarely does erectile dysfunction come up in respiratory disease discussions and if it does, it is infrequently or inadequately addressed. This may be because of uncertainty around the existence or the cause of ED in COPD.

For a working definition, ED is the inability to persistently reach and/or maintain an erection sufficient to have satisfactory sexual activity including intercourse.³ Whilst this may be often a source of amusement to the non-sufferer, it can have a profound effect on quality of life of the person affected. At a time when many every day activities are becoming limited, the inability to maintain a satisfactory sexual relationship may be the one potentially remediable problem that is of concern to the sufferer. An international study, examining men's attitudes and behaviours in relation to their ED, emphasized the importance of the couple's relationship and strengthened the view that ED matters to men because of its significant impact on valued partner relationships.⁴ We have known about ED and COPD for some time. Fletcher and Martins work in 1982 reported rates of 30% of people with COPD experiencing ED compared with the controls.⁵ Later studies, for example, Köseoglu et al.,⁶ found rates of 75.5% similar to Collins

et al.¹ whose study showed around 74% but all were in relatively small numbers of patients or by passive questionnaire and therefore difficult to extrapolate to the whole population.

A more recent study by Kahraman et al.⁷ compared erectile function of two groups of men aged between 42 and 81 years. Most (80%) of those with COPD had problems with their erections, whilst the rate in those without a COPD diagnosis was 56%.⁷ In a later article by Shen et al., over 29,000 males with COPD age and index year matched with the controls found the incidence of ED was 1.88-fold higher in the COPD population, but they had more prevalent morbidities such as diabetes, depression and anxiety, and poor control of COPD was a key factor in ED development so those with more emergency visits and admissions were more likely to have ED.²

In this issue, Turan et al. remind us that sexual problems, inclusive of ED are not commonly addressed by health professionals. This sensitive discussion is often overshadowed by the prevalence of disturbing symptoms such as breathlessness, infection and respiratory failure. It may be that patients have a lack of understanding of how ED and their lung condition could be related. As health professionals, we recognize how factors such as hypoxemia can be an important factor for ED, therefore both patient education and a thoughtful holistic assessment are required by those with COPD to address this possible 'hidden need'.

So where does this lead us to? ED may be physical or psychological. The relationship with lower oxygen levels is known, and we know that ED is more common at

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altitude due to this factor even in healthy males. Lifestyle choices such as smoking and obesity where the link of ED and obstructive sleep apnoea and diabetes is established are considerations and may be related to hypogonadism or low testosterone levels that have been found in males with COPD. Medications that can sometimes cause sexual dysfunction, including anticholinergics, antihistamines, beta-blockers (and other kinds of antihypertensives), and long-term use of nicotine.

What is becoming evident is that COPD itself as a disorder is also a risk factor for ED. The authors suggest the presence of ED should be routinely addressed by health professionals. In a UK study of 100 patients with lower urinary tract and ED, 91% of untreated ED patients said they would like medical treatment.⁸ It is likely there would be a similar response in male COPD sufferers. For this to occur, health professionals need to develop the communication skills and confidence to start this conversation and develop a therapeutic bond. After the possible physical contributing factors have been discussed, the overall assessment of patient need is crucial. A true patient experience can be better understood by asking questions around relationships, understanding of ED, spirituality, social background and Turan emotional considerations such as body image. Being a good listener, acknowledging the problem is important and if possible offering practical advice can help. Helping patients to cope with the impact of the disease process on their lives, including their lives as a sexual identity is essential. This approach focuses on the impact of chronic lung disease and the symptoms it causes in our patients.

Ultimately, the healthcare professional needs to be able to offer support and possible treatment. What we do not know from studies so far is as to whether there is a remediable solution to ED in COPD beyond standard treatment.

The article by Turan et al. raises and reminds us of an important issue in COPD care and management.

Whilst the specific mechanism is not yet established, COPD in itself is again shown to be a risk factor for ED, with sexual problems and breathlessness the reasons for adaptation to the disease, rather than the disease itself, and we owe it to our patients to both raise and address the issue with them.

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