



EDITORIAL

Erectile dysfunction and COPD – Cause or association



Since the early work of Fletcher and Martin in the early 1980s researchers have looked at the association of erectile dysfunction in people with a diagnosis of COPD.^{1–4} Although a seemingly common problem with most of the studies reporting a similar prevalence, the matter is not straight forward as it is compounded by the various methodological differences within the studies, the presence of co-morbidities and risk factors such as smoking and medication use.⁵ It is often difficult to distinguish what came first the ED or the COPD or whether there is purely an association and/or whether there are actual causal links. Unfortunately, over the prevailing 35 years since the connection has been discussed this issue still appears to be largely unaddressed by health care professionals despite the impact that it has on the lives of people with COPD and also their partners. This study by Dias et al.⁶ raising the association of erectile dysfunction and COPD, similar to previous publications also found a failure by patients and health care professionals to introduce the issue and subsequently address it.

As with similar studies the Dias paper looked at prevalence, risk factors and the impact of dyspnoea, using questionnaires for evaluative purposes, alongside demographic detail, medication use, smoking and lung function. As is the wont of these studies the numbers can often be small and therefore hard to generalise and the study did not look for hypogonadism or low testosterone levels, both more common with the ageing process.⁷

There are also problems in using self-reported questionnaires as these can be subjective rather than objective. In those with anxiety or depression can lead to a more pessimistic outlook although no one in this study reported severe ED. What is more difficult to understand from the Dias study⁶ is that it was mainly in GOLD B and D categories for COPD whom were reporting problems, noting that these categories were also higher scoring in response to the HADS questionnaire and had higher levels of arterial hypertension and dyslipidaemia. It may be that this is linked to anxiety and perception of symptoms. Whilst the GOLD B group had

what is essentially mild disease but higher symptom levels, one could presume that their high levels of reporting of ED was led either by comorbidity and/or anxiety. What we know is that for men, an erection begins in the brain and whilst many cases of ED may have an underlying physical issue, some are undoubtedly emotionally based. The brain and nervous system control sexual functioning desire, as well as orgasms. High levels of anxiety, a fear of failure, and failure in communication can affect libido and function. Interestingly Dias et al.⁶ report high levels of failure to communicate any problems to health care professionals although the reasons for this are not explored.

Demographics from the studies were similar to older studies with continued smoking amongst some of those studies which has its own links with ED. Additionally the link between ED and cardiac disease has also been established for a long time. This has been described by Mercola as ‘the canary in your trousers’, clearly establishing ED as an early warning of cardiac dysfunction.⁸ A large Australian study in over 95,000 men found that compared to men without erectile dysfunction, there was an increased risk of ischemic heart disease, peripheral vascular disease, and death from all causes in those with increasing degrees of severity of erectile dysfunction.⁹ The authors emphasize that erectile dysfunction is a risk marker for cardiovascular disease, not a risk factor that causes cardiovascular disease, and not surprisingly the figures and association rose with age.⁹

What we often forget is the effects of medication on ED and taking a good medication history can be a good opener to discuss with people as to whether they are experiencing any side effects. Dias and colleagues mention the most important medications, such as beta blockers and thiazides. However whether it is the underlying cardiac problem or the medication side effect contributing to ED is hard to unpick. What also may impact on ED are anticholinergics, corticosteroids and alcohol use although these are not reported in this study.⁵

Studies into ED so far have found a tendency for it to be more common in the older population, in those with more perceived breathlessness which will correspond to higher scores on the mMRC, CAT and HADS questionnaires. There is also the weak correlation of ED with those people using LTOT

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and over half of the people reporting ED in the study were on oxygen, which would also be a marker of more severe disease. So the causative factors are never quite clear. Many respondents will report breathlessness during sexual activity although increased heart rate and breathing can often be, and should be a consequence of sexual activity for those without breathing problems. We need to remind people of this fact and offer common sense advice about controlling breathlessness and pacing activities. Interesting this paper links breathlessness with a reported mention that respondents were not as sexually active as they liked, whether this is symptom related, age related, or indeed partner related is unclear.

The article by Dias et al.⁶ again raises the issue of the association between erectile dysfunction and links with COPD and of the importance of discussing this with patients. It doesn't appear that ED is linked to lung function, but then we have been aware for a long time that neither are symptoms. What is a stark reminder is that we still failure to elicit concerns amongst those we see with COPD and yet this may be one remediable issue.

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