Clinical case review

Recent impotence in a cyclist

Commentary by DOUGLAS W. LORDING BMedSc, MB BS, FRACP

Is prolonged bicycle riding likely to be a cause of erectile dysfunction in a middle-aged man? What investations and management might be appropriate

in this case?

Case scenario

A fit 55-year-old man has experienced four failed attempts at erection over the past month. During the past two months, he has increased his Sunday morning bicycle ride to 75 km. He has heard that cycling can cause impotence and cancer. Is this the most likely cause of his impotence? What can I advise this patient?

Commentary

About a third of 55-year-old men self-report some problems with erectile function. The most common causes are the association with cardiovascular risk factors such as diabetes, hypertension, hyperlipidaemia and cigarette smoking, and depression. A clinical assessment of any 55-year-old presenting with erectile dysfunction should address these issues.

Psychogenic factors should not be ignored, and in this case there should be direct questioning about potential precipitants of psychologically based erectile dysfunction. For instance, it would be important to know if there was any clear-cut precipitating factor and if erections are affected in a global pattern.

Bicycle riding can cause erectile dysfunction because of perineal trauma to nerves and arteries. Such affected men

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Figure. Cycling can be a cause of impotence (not the case patient).

usually experience paraesthesia or numbness in the perineal area after riding. This can occur either because of the seat shape and the continuing trauma of prolonged cycling, or because of a discreet perineal injury caused by a sudden compressive force onto the seat. The nature of the injury is often reversible with elimination of the ongoing trauma, and this may be accomplished either by ceasing riding or by changing the bicycle seat's shape and structure and the padding used. Most modern seats are now split to avoid pressure on the perineum and to provide support to the ischial tuberosities.

Advanced invasive prostate cancer can cause erectile dysfunction directly, but usually the association between erectile dysfunction and cancer is the surgery or other therapies required in the treatment of prostate or bowel cancer. Chemo therapy agents used for other cancers can cause testosterone deficiency.

After taking a careful history and performing an examination, cholesterol, glucose and testosterone levels should be measured. In this patient, it will be unlikely that cancer is a cause. It will be necessary to make a clinical judgement, based on the above assessments, as to whether cycling or some other factor is likely to be the cause.

If, as seems probable, cycling was the cause of the problem, I would suggest the patient avoids bicycle riding and returns for a review in four weeks' time. There is a case for the early use of phosphodiesterase-5 inhibitors (sildenafil [Viagra], tadalafil [Cialis], vardenafil [Levitra]) to minimise the secondary psychological impact of continuing erectile dysfunction, although should there be severe neurological trauma, these may not be effective. If recovery of erectile function does not occur, referral to a specialised centre for a thorough investigation of the vascular system should be considered.

DECLARATION OF INTEREST: None.

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