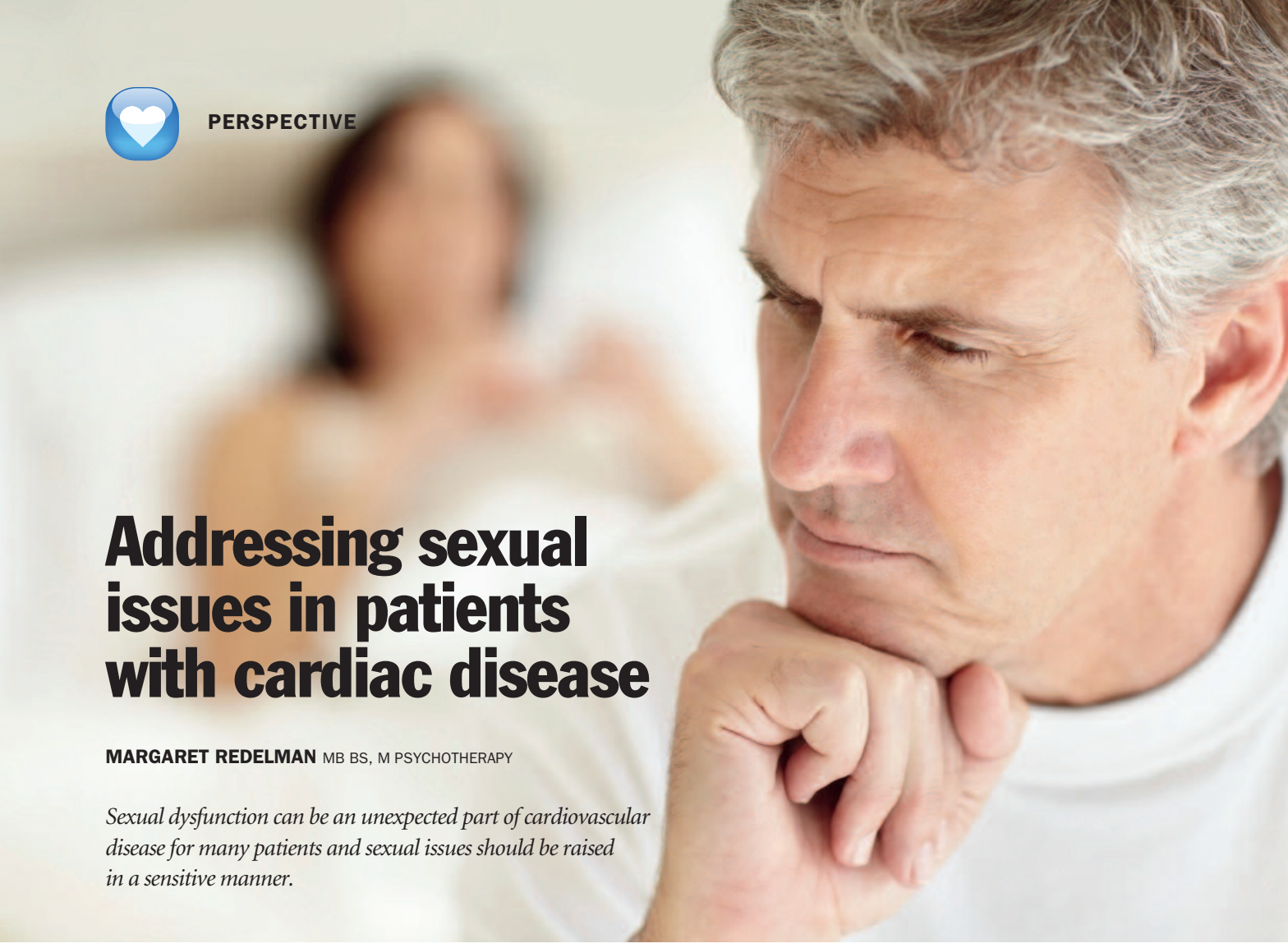

PERSPECTIVE

Addressing sexual issues in patients with cardiac disease

MARGARET REDELMAN MB BS, M PSYCHOTHERAPY

Sexual dysfunction can be an unexpected part of cardiovascular disease for many patients and sexual issues should be raised in a sensitive manner.

Sexual thoughts, feelings and behaviours are a normal healthy function of being human, and sexual activity plays a significant role in the happiness and satisfaction that people feel in their lives. The doctor–patient relationship also benefits significantly when sexual function concerns are addressed.[1] Current research suggests that there is a strong relation between cardiovascular disease (CVD) and sexual function, especially between erectile dysfunction (ED) and coronary artery disease (CAD) as sequelae of endothelial dysfunction.[2-5] There is some evidence that the same processes and factors are associated in female sexual dysfunction.[6,7]

Men and women with CVD have a higher incidence of sexual dysfunctions than the general population.[8] There is a commonality of risk factors for CVD and sexual dysfunction including diabetes, hypertension, dyslipidaemia, obesity, smoking, metabolic syndrome, sedentary lifestyle and depression.[9-13] Primary care physicians and cardiologists need to be comfortable with addressing sexual health in the context of cardiovascular health (see the boxes on page 33). ED is the most researched sexual dysfunction but general sexuality is negatively affected by strokes, myocardial infarctions, angina, congestive heart failure and valvular disease in both sexes.[6,8,14] The sexual health of partners of patients with CVD also needs to be considered.

Key points

- **Primary care physicians and cardiologists can provide patients with cardiac disease with holistic care.**
- **Sexual function may be an early warning sign of cardiac disease.**
- **It is important to improve the quality of life and motivation for self-care in patients with cardiac disease.**
- **Patients with cardiac disease who are in relationships are in a two-person system and the sexual health of both partners needs to be considered.**

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Addressing sexual health issues

For many health professionals there is an 'awkwardness factor' in dealing with the sexual health of their patients because it has traditionally been a 'taboo' and 'private' subject. However, it has been found that patients 'suffer in silence as they assume that, if sexuality and intimacy were important, health professionals would discuss them'.[15] It is important that health professionals acknowledge that sexual health is:

- a valid area of concern for patients
- an important factor to consider in medical interventions
- within the health professional's role to raise issues prospectively and holistically.

In fact, most health professionals believe that sexuality is important; however, this does not usually transfer to clinical practice. Referral of patients to a sexuality specialist can only take place once sexual concerns have been acknowledged.

Open-ended respectful general questioning implying that enquiring about sexual function is normal standard care in cardiovascular management will ensure that everyone is comfortable. For example, 'I ask all my patients with cardiac problems about their sexual health. We know that the two conditions have similar risk factors and treatment for cardiac conditions can affect sexual function. Sexual problems can warn us of underlying coronary problems, which, if addressed early, can be life saving'. General questions such as 'Have you noticed any sexual changes or do you have any concerns you'd like to discuss?' can be included.

CVD and sexual activity

Few people receive a good education about sexuality including knowledge about potential sexuality changes with age and health problems, and very few people have knowledge of CVD. Patients with CVD and their partners often fear dying, worsening cardiac function, triggering a myocardial infarction or re-infarcting during sexual activity. These fears are out of proportion to available research data;[8,16-20] death due to sexual activity is infrequent.[21-24] The group most at risk of experiencing heart problems during sexual activity are men with underlying cardiovascular risks, who are having sex with a new partner, in an unfamiliar setting, with a large age differential and after a heavy meal with alcohol – that is, when there is too much to prove. On the other hand, studies have shown that men who have regular moderate sexual activity have a lower mortality rate.[25-27] Of course, these men may have a better sex life because their cardiac (and penile) health is better.

In a stable relationship, exertion during sexual activity is relatively moderate.[28,29] Myocardial oxygen demand is only mildly increased during sexual intercourse and lasts a brief time.[30] Sexual activity uses only two to four metabolic equivalents of energy expenditure.[31] The guidelines from the Second Princeton Consensus Conference provide advice for stratifying risk of sexual activity for patients with cardiac disease (see the box on page 34).[2,32] Sexual activity only needs to be deferred by high-risk patients until they have been assessed and stabilised by a cardiologist.[19,33] However, 'sexual activity' needs to be defined. There is a spectrum of sexual activity from acrobatic hour long sex with vigorous intercourse to quite gentle outercourse, and the permitted activity needs to be discussed clearly with the patient.

Increasing physician's comfort with addressing patients' sexuality

- Actively educate yourself
  - define normal sexuality for both males and females
  - understand the effects on sexuality of age, illness and treatment
- Become comfortable using intimate or sexual words and language
- Think about your own sexual education and experiences so that you can keep a clear boundary between your experiences and those of the patient
- Seek help to deal with any sexual trauma you may have experienced
- Learn about culturally based sexual myths and attitudes – it is important not to assume 'sameness' in our multicultural society
- Make friends with your own body

Increasing patients' comfort with sexuality being addressed

- Establish context and normalise the condition, situation and effect of age or medication/treatment
- Use the correct body language
  - show respect to patients
  - give patients enough time and privacy to discuss their issues
- Establish and use the same words as patients for sexuality and intimacy
- Ask open-ended positive questions
- Adopt a nonjudgemental position

Sexual dysfunction

Men with CAD have a higher incidence of sexual dysfunction than age-matched healthy men.[34-36] It was estimated that 25% of Australian men had some degree of ED and that about 85% of them were untreated.[37] ED is four times more likely to occur in men with CAD risk factors. There is now compelling evidence that ED itself is a risk factor for CAD[2] and may be the key marker of silent myocardial ischaemia and a predictor of subsequent myocardial events.[38,39] ED may precede CAD symptoms by two to three years and CAD events by three to five years.[40-42] The median time interval between manifestation of ED and death from CVD has been found to be

10 years.[43] Enquiring about sexual function may provide an opportunity for aggressive lifestyle and medical interventions using improvement of sexual function as an incentive.

Only a rounded history will highlight areas needing further evaluation and management. A psychosociosexual history needs to be taken before the medical evaluation is conducted to make the recommended management contextually appropriate (see the box on this page). Premorbid sexual function and relationship quality are major determinants of post-crisis sexual activity. Providing a phosphodiesterase (PDE) 5 inhibitor to a man with a sex-aversive partner may achieve little. Patients may also need the opportunity to say they do not desire sexual activity and to have this choice validated. Sexuality is not important to everyone and there is a gradual age-related decline in sexual interest.

Classification of cardiovascular risk associated with sexual activity according to the Princeton Consensus[32]

Low CV risk – management in primary care

- asymptomatic patients with less than three CV risk factors
- controlled hypertension
- class I mild stable angina
- coronary revascularisation (no significant residual ischaemia)
- MI more than six weeks previously
- mild valvular disease
- left ventricular dysfunction (NYHA class I)
- pericarditis
- mitral valve prolapse
- atrial fibrillation with controlled ventricular response

Action: check ups every six to 12 months. Sexual activity is not contraindicated. Candidate for ED treatment.

Intermediate CV risk – management in primary care with testing or management by specialist

- asymptomatic patients with three or more CV risk factors (excluding gender)
- class II to III moderate stable angina
- MI between two and six weeks previously
- left ventricular dysfunction (NYHA class II)
- noncardiac sequelae of arteriosclerosis: CVA, peripheral artery disease, TIAs

Action: based on exercise stress testing, restratify risk into low- or high-risk category; check ups every six months.

High CV risk – refer the patient to cardiac specialist or secondary care for assessment

- unstable or refractory angina
- uncontrolled hypertension
- congestive heart failure (NYHA class III or IV)
- MI or CVA less than two weeks previously
- high-risk arrhythmia
- obstructive hypertrophic cardiomyopathy
- moderate or severe valvular disease especially aortic stenosis

Action: patient should be stabilised before treatment of ED.

Adapted from Kostis JB, Jackson G, Rosen R, et al. Sexual dysfunction and cardiac risk (the Second Princeton Consensus Conference). Am J Cardiol 2005; 96: 313-321.[32]
ABBREVIATIONS: CV = cardiovascular; CVA = cardiovascular accident; ED = erectile dysfunction; MI = myocardial infarction; NYHA = New York Heart Association; TIA = transient ischaemic attack.

Treatment of sexual problems

Most people have poor memories and this is especially so for retrospective sexual activity, the outcome being that sexual changes are attributed to crisis points whereas they usually started before these. So it is important to establish a baseline of sexual function before treatment and/or medication is started. Opening the line of communication about sexual health allows for early intervention. Significantly, good medication may be stopped or used randomly because patients incorrectly attribute changes in sexual function to the medication. Raising the possibility of sexual consequences from medications can open dialogue for managing the consequences.

Phosphodiesterase 5 inhibitors

The advent of the use of PDE5 inhibitors offered a paradigm shift in the management of patients with ED, and PDE5 inhibitors are now first-line treatment for men with ED with only a few contraindications, notably concurrent use of nitrates.[32] However, education on correct use needs to be included – that is, advice that up to six attempts with food and alcohol restrictions may be needed, and the timing of taking medication for optimal absorption (30 minutes to two hours before intercourse) may need to be adjusted until the patient understands his metabolic requirements. Additionally, the need for good conditions for sexual activity,

Basic psychosociosexual history

Psycho

- Personality and psychiatric health of patient and partner
- General happiness and contentment

Socio

- Quality of the relationship
- Willingness/desire for sexual activity
- Life and health stressors

Sexual

- Previous sexual history – genital function, orgasmic history, frequency (desired and achieved) of both partners
- Current sexual situation – history of the sexual dysfunction(s), current lovemaking pattern
- Masturbation history and function
- Sexual function outside current relationship (in a solo session)

including time of day, the effect of other medications, time, privacy, an interested partner, some energy for sex, some erotic inclination and good enough penile stimulation, must be discussed. People develop habits around making love and often these are not 'good enough' with increased age, health and medication changes.

Testosterone

Testosterone has been increasingly implicated in the treatment of male and female sexual dysfunctions. Research has shown its efficacy in postmenopausal women.[44,45] Male hypogonadism is associated with ageing, type 2 diabetes, metabolic syndrome and chronic systemic conditions. Patients who fail a trial of PDE5 inhibitors may benefit from the addition of testosterone.[46,47] Research suggests that at physiological levels testosterone has a neutral or possibly beneficial effect on the function of the cardiovascular system and no increase in risk of CVD.[48,49] It also has a beneficial effect on insulin sensitivity, central obesity and cholesterol levels.[49]

Lifestyle modifications

There is significant research evidence that lifestyle modification is useful in both patients with CVD and sexual dysfunction. Weight loss and increased physical activity have been shown to improve erectile function.[50-53] Regular exercise is cardioprotective and corrects for the risks associated with sexual activity.[26,54] Depression is prevalent with ageing, chronic conditions, life-threatening conditions and sexual dysfunction.[55] Exercise has been shown to be equally effective as antidepressant medication in patients with mild-to-moderate depression with more benefits and fewer side effects.[56] Cessation or a decrease in smoking is important, particularly in men with ED.[57] However, body image, ability to move, energy levels, feeling attractive and being attractive to the partner are all important components of positive sexuality.

Relationship issues

Most sexual activity takes place within the context of a two-person relationship. Within a long-term relationship, issues of power, anger, complacency and bad habits negatively affect sexual function. Most people do not have the communication skills to discuss positive sexuality or sexual difficulties. In addition, some goodwill needs to be present for constructive discussion. A couple's style of love-making that may have worked in previous years may now not meet their needs and must be discussed in detail. The sexual function and general health of the partner must always be included as many female partners will be peri- and postmenopausal and have their own health and sexual problems, and male partners their own sexual issues. The clinician needs to be comfortable with asking these personal details.

Sexuality education

Simple sexual function and sexuality education may be of great benefit to patients with CVD. Some factors to include in sexuality education may be:

- teaching basic male and female sexual physiology so that the couple understands that a sexual 'failure' is not 'intentional'
- teaching that leaving sexual activity for night time may not be ideal, because automatic function is best in the morning or during the day, or after a rest
- experimenting with timing of medication, such as for pain or arthritis, for best sexual response
- explaining that the missionary position for intercourse is not ideal for older men and positions such as spooning or scissors, where each partner supports their own body weight, may be helpful to allow for more relaxed lovemaking
- suggesting that the woman on top position may allow for penetration and containment of a slightly softer penis to the sexual pleasure of both
- encouraging the use of lubricants for improved ease of penetration.

The inclusion of pelvic floor exercises for both sexes can be beneficial for improved strength of orgasm and sexual function. Sexual toys and aids, within the comfort zone of the patient and partner, may enable greater enjoyment and sexual satisfaction despite sexual changes. Increased variety and a sense of adventure and humour are great aphrodisiacs.

Broadening a couple's range of sexual activities together from self-masturbation to mutual masturbation to oral sex, and from 'quickies' to longer penetrative sex enables greater flexibility and acceptance of 'having pleasure together' as opposed to the 'erection-penetration-orgasm' paradigm needed for procreation. Masturbation can be a very useful activity for maintaining sexual function in couples in whom regular lovemaking is not occurring, for whatever reasons, and for single individuals. With ageing the 'use it or loss it' paradigm is true for sexual function; however, the focus needs to be on pleasure, fun and interpersonal meaningfulness.

Conclusion

The take-home message is that sexuality is an important component of most people's quality of life and should be an important valid area of concern for health professionals. Cardiovascular health and sexual health are inextricably linked and must be addressed together, especially as the sexual dysfunctions of ED in men and possibly arousal and lubrication difficulties in women can be early warning symptoms of CVD. Shyness and embarrassment should not limit the help patients receive for sexual dysfunction, and medication and devices are available to assist with most sexual problems. 'Information about the limited risks involved in sexual activity and guidance and support through the process of return to normal sexual activity, can speed the process' of returning to positive sexuality.[58] **CT**

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A list of references is available on request to the editorial office.

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JUNE 2012, VOLUME 2, NUMBER 2 CardiologyToday X