The continuing challenges of improving men’s health

FELIX DAVID

Cardiovascular disease, liver disease and colon cancer were among the areas discussed during the latest Men’s Health Conference held at the Royal Society of Medicine in June.

“Why is men’s health important? Because being a man is a significant health risk,” said Professor Roger Kirby, consultant urologist and director of the Prostate Centre in London, in his presentation on the current state of men’s health in the UK.

In all age ranges, the life expectancy for men is shorter than it is for women – and they are much more likely to suffer a premature death. Although this gap has reduced in recent years it remains significant, and some important contributing factors are that men are more susceptible to cardiovascular disease (CVD), are more likely to drink and smoke to excess, are less likely to have a good exercise and diet regimen, and they have a higher completed suicide rate than women. In addition, men have a higher mortality rate from cancer than women because they often present late, and they are at an increased risk of HIV and AIDS in general.

Despite the high mortality, “men’s health has been ignored for many years,” said Prof Kirby, and “although most practices will have a women’s health specialist, it is unusual to have a men’s health specialist, which I think is something that we should discuss and possibly change.”

CVD, liver disease and colon cancer were highlighted as key areas for future focus. In recent years, for example, cardiovascular mortality has declined by...
over 30%; yet in men at the age of 40, there is still a two in three chance that they will develop CVD during their lifetime,¹ which shows “there is a lot of work still to be done even though mortality has reduced,” said Prof Kirby.

Liver disease, on the other hand, is the only major cause of mortality that is still increasing each year, with over four times more people dying from it now than in 1980.² The main cause was cited as a substantial increase in alcohol consumption, specifically binge drinking, but obesity, fatty infiltration of the liver and hepatitis were also important factors.

In colon cancer, it was emphasised that the disease is preventable as long as it is detected early. In all cases, a CT colonography should be used in preference to a colonoscopy as it is as it is better tolerated by patients, being less invasive, more convenient as it does not require any sedation, and allows extracolonic organ review at the same time as the colon review.

Prof Roger Kirby highlighted that a better insight into men’s health, alongside education and “helping men to help themselves”, were useful solutions. It was diet and exercise, however, that was emphasised as the best preventative measure against liver disease and CVD, with a study showing that in 2008 physical inactivity caused 5.3 million of the 57 million deaths worldwide.¹ The acronym PLACE (Portion control, Lose the booze, Axe the snacks, Cut the carbs, Exercise every day) was suggested as a tool to help focus patients on achieving health and lifestyle goals. However, moderation is the key as extreme episodic exercise is associated with instances of myocardial infarction and sudden cardiac death.

Erectile dysfunction as a marker of vascular disease
In his presentation, Professor Mike Kirby, GP and visiting professor to the University of Hertfordshire and the Prostate Centre, provided an update on current research investigating erectile dysfunction (ED) as an early marker of CVD.

ED and CVD have been shown to have similar aetiologies, namely smoking, high blood pressure, high cholesterol and diabetes, while also sharing the common denominator of endothelial dysfunction. The penile arteries are much smaller in diameter (1-2mm) than the coronary arteries (3-4mm), which means that only 25% of the lumen of the penile artery need be lost to result in suboptimal erections, while a loss of around 75% of the lumen of the coronary artery can lead to angina. ED can therefore be an early sign of vascular disease, which makes it very important for health professionals to ask patients about the duration of night-time erections and the quality of erection firmness as both are “a determinant of blood supply to the penis and endothelial dysfunction,” explained Prof Mike Kirby.

There have been only a few studies examining the link between ED and CVD. A 2010 Finnish study involving 1549 patients at high-risk of a cardiovascular event showed that if a participant had ED at baseline it was predictive of all-cause mortality (hazard ratio 1.84), cardiovascular death (hazard ratio 1.93), and myocardial infarction (hazard ratio 2.02).⁴ This risk appears to be particularly pronounced in younger men, with a separate 2009 study showing that in men aged 40–49 years, those with ED at baseline had nearly a 50-fold increase in the risk of suffering a coronary event after 10 years when compared to men without ED.⁵

ED “is therefore a very strong risk marker of a future coronary event,” said Prof Kirby, and on average, in those patients with ED and CVD, “ED occurs five years before your first coronary event and three years before your first coronary symptoms – so [there are] missed opportunities for doctors to ask patients about erectile dysfunction and then check a portfolio of other risk factors for CVD.”

The maintenance of sexual function was also demonstrated to be a significant predictor of general longevity in men. A Swedish study showed that the cessation of sex earlier in life is associated with premature death, while a 1997 study found that there was a 50% reduction in cardiac death among men who had more than two orgasms per week.⁶⁷ These results were similar in women, with a study showing that past enjoyment of sexual intercourse was a strong predictor of longevity, calculated to equate to an extra 4.28 years of life.⁸ “It appears that quantity is more important for men, and women prefer quality,” said Prof Mike Kirby.

Phosphodiesterase type 5 (PDE5) inhibitors were demonstrated to be especially effective in the treatment of ED and CVD as they reduce the risk of mortality and improve endothelial function of the coronary arteries.⁹ Lifestyle is also important and the best diet is Mediterranean inspired, with the addition of nuts and the avoidance of red meats and concentrated dairy products. The Moli-Sani study, for example, followed up the diets of nearly 25,000 people over a five-year period, with results showing a 21% reduced risk of death in those with high- adherence to a Mediterranean diet.¹⁰

In terms of exercise strategy, the key goal is to move patients from being sedentary to moderately active, as vigorous activity is also associated with health risks. This transition results in a large reduction in the risk of a cardiovascular event, and patients should complete one hour of moderate exercise each day, split into two 30-minute sections in the morning and afternoon. An improvement in sexual function is a good way to encourage patients to complete the exercise regimen, with a study showing that a 4.7kg weight loss had a significant effect on erectile function.¹¹ However, if this fails to motivate the patient, then Prof Kirby advised doctors to ask them: “What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

Management of acute coronary artery disease and secondary prevention
In his presentation on acute coronary artery disease Dr Cliff Bucknall, consultant cardiologist at London Bridge Hospital, used the metaphor of a melting ice cube to demonstrate how quick reaction time and early diagnosis was key to improve the mortality associated with the condition.

“The reality is that right now the diagnosis is too late,” said Dr Bucknall, as currently 62% of men and 46% of women have myocardial infarction or death as their initial presentation of coronary artery disease (CAD). Regrettably, this
Timing does not appear to be improving and so it is critical that any patient presenting with a coronary event “nowadays should be taken straight to the cath [catheterisation] lab, not A&E,” said Dr Bucknall. Once there, an automatic compressor needs to be applied to the patient and the artery opened immediately. Every second counts, as until this happens, the patient rapidly loses myocardial cells that can directly have an impact on their chances of survival and quality of life afterwards.

To determine if a patient is suffering a myocardial infarction, an ECG and a troponin test should be used. In the past, the high threshold level in the troponin test could result in patients with low levels of troponin being missed, but who were nevertheless suffering a myocardial infarction; so a patient now only needs to present with a minor change in their troponin levels to be considered to be suffering a potential myocardial infarction. “This makes it a lousy test [for specialists] but a great test for A&E,” said Dr Bucknall, as a patient presenting with possible myocardial infarction but with low troponin levels is not critical, especially if during a second troponin test there is no significant change. However, that does not mean the patient is entirely well, as they may have unstable or stable angina, “which is a repeated concern we have to emphasise to our clinical colleagues,” said Dr Bucknall.

The initial diagnosis of myocardial infarction is also difficult because the typical symptoms of chest pain, dizziness, nausea or vomiting, shortness of breath and so forth can have a range of differential diagnoses, which makes it difficult to decide who to send to hospital. If either a non-ST segment elevation myocardial infarction or unstable angina is suspected then treat with aspirin (300mg initially then 75mg daily), ticagrelor (180mg initially then 90mg twice daily), beta-blockers, nitrates and consider a coronary angiography within 72 hours. After an acute coronary event, the immediate treatment is very similar, with aspirin, ticagrelor and a proton pump inhibitor to prevent bleeding, especially as ticagrelor needs to be continued for 12 months, and atorvastatin 80mg.

Alongside this, lifestyle factors such as diet, exercise, stopping smoking, and cardiac rehabilitation are key, and are also often easier to encourage now that the patient has survived a life-changing event. However, despite initial enthusiasm, one study found that only 25% of patients adhered to a low-fat diet and exercise one year after a myocardial infarction, while just 40% reduced their alcohol intake. However, as a positive, it was also found that 75% of patients were still taking their medication one year after a myocardial infarction, and 77% remained ex-smokers.

Dr Bucknall concluded that in order to improve the success of secondary prevention interventions “cardiac rehabilitation is really important. Patient education has got to be there, and we have to have early referral to make sure we don’t miss anybody.” Cardiac rehabilitation is the most cost-effective measure, which is why it is recommended by NICE, “so one thing you can really do for your patient to help them avoid another coronary event is encourage them to continue with their cardiac rehabilitation.” Up-to-date resuscitation training is also crucial, “as there is nothing more embarrassing than losing a patient just because you didn’t ‘go to that session’.”

References