



A study of patients with Coronary heart disease and their expectations regarding Sexual health.

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ABSTRACT

Background The aim of the study was to evaluate sexual function in patients with coronary heart disease (CHD) and the use of sexual knowledge in cardiology practice, both current use and that expected by patients. **Methods** One thousand one hundred and thirty-six patients (average age: 60.73 ± 9.20) underwent a dedicated survey which encompassed demographic data and the presence of modifiable ED risk factors. **Results:** Attitude to sexual function was significantly associated with age ($p < 0.0001$), duration of CHD ($p = 0.0018$), education ($p = 0.0011$), presence of ED ($p = 0.0041$), diabetes ($p = 0.0283$) and hyperlipidaemia ($p = 0.0014$). **Conclusion** The low frequency with which cardiologists initiate the topic of ED is in contrast to the expectations of patients with CHD.

KEYWORDS : CHD, sexual health.

Introduction

According to the definition of the National Health Institute Consensus Panel on Impotence, erectile dysfunction (ED) is characterised by a permanent inability to attain and/or maintain erection of the penis sufficient to permit satisfactory sexual intercourse [1]. The pathophysiological mechanism of ED may have a psychological, neurological, hormonal, vascular, cavernosal, or combined character [2]. However, in recent years particular attention has been paid to the coexistence of ED and cardiovascular diseases. The National Institutes of Health Consensus Panel on Impotence stated that "most of the medical disorders associated with ED appear to affect the arterial system". They especially affect men over 50 years of age. In this group, up to 40% of ED cases are associated with vascular disorders [1]. This stems from the pathophysiology of these two disorders. Both originate from many common risk factors affecting the endothelium which cause the progression of atherosclerosis and the beginnings of ED [3–6]. The association between these disorders translates into a significant percentage of cardiac patients who also suffer from ED. A cardiologist's competence and skills may significantly improve the quality of life of such patients [7].

The aim of the study was to assess the importance of good sexual function to patients with CHD and the current use and patient-expected use of sexual knowledge in cardiology practice.

Materials and methods

A group of 1136 patients were selected from 1st Jan to 31st December, 2016. All patients were being treated for coronary heart disease (CHD) and were undergoing cardiac rehabilitation.

An analysis of the intensity of physical activity was carried out using a questionnaire modelled on the Framingham questionnaire [8]. Duration of physical activity was estimated with an accuracy of up to one quarter of an hour. The minimum level of physical activity appropriate in prevention of cardiovascular diseases was set at the value of energy expenditure equal to 1000 kcal per week [9].

The presence of ED was assessed using a shortened version of the IIEF-5 [10]. Patients with ED occurring because of surgical treatment of prostatic hyperplasia or prostate cancer were excluded from the study.

Results

One thousand one hundred and thirty-six questionnaires were analysed. In the analysed group of patients, cardiologists initiated a discussion about ED with 45 patients (3.96% of the study group).

Eight of these patients (0.07%) had already started on therapy with PDE-5 inhibitors.

Attitude to good sexual function was significantly correlated with the time from diagnosis of CHD ($R = -0.0924$; $p = 0.0018$), the level of education ($R = -0.0962$; $p = 0.0011$), and the presence of ED. Attitude to good sexual function, by presence of ED and modifiable CVD risk factors, is presented in Table 2.

Including age and education level of respondents in the analysis reveals the fact that expectations for the topic of sexual function to be addressed by cardiologists is significantly associated with the presence of ED (OR = 1.7307; 95% CI: 1.1405–2.6264) in younger (OR = 0.9810; 95% CI: 0.9639–0.9984) and better-educated patients (OR = 1.2675; 95% CI: 1.0771–1.4916).

Discussion

Results of epidemiological studies conducted until now clearly indicate an association between ED and CHD [11]. The knowledge of this association, its role in the pathogenesis of both of these disorders, and the risk factors which are important for inducing atherosclerosis indicate the great usefulness of ED assessment, as ED is regarded as an early marker of atheromatosis in a wide population of men [12, 13]. Interest in the presence of ED and, consequently, its prevention and pharmacological treatment offered to patients with previously diagnosed CHD results in an increase of their quality of life [14–16]. Therefore, undoubtedly sexual knowledge is useful in cardiology practice. Questions are raised as to what part of this knowledge is currently used in everyday cardiology practices, how patients with CHD perceive the importance of good sexual function, and what they expect from cardiologists in the field of sexual health.

In the analysed group of patients with CHD, a cardiologist-initiated conversation about ED was reported in 45 (3.96%) cases. Similar results were obtained by Bedell et al., who reported that only 3% of male respondents claimed to be adequately informed about their sexual functioning [17]. Also the analysis performed by Kloner et al. revealed that most of men had not previously discussed the topic with their cardiologist [18]. In the CHARMS study, up to 66% of the respondents claimed that they had never talked about sexual problems during a medical visit [19]. Similar results of doctors' interest in the sexual function of their patients are reported by the doctors themselves. Nicolai et al., who surveyed 414 cardiologists, found that 16% of them discussed sexual problems during their patients' visits, and as many as 70% rarely or never advised patients who have suffered a myocardial infarction to resume sexual activity

[20]. Only Roth et al., who conducted a telephone survey on a group of 379 specialists, reported that among the cardiologists, 77% declared personal engagement in managing patients with sexual function disorders. However, as many as 74% of the doctors underestimated the frequency (as published in the medical literature) of ED in patients in general and among cardiac patients [21]. In the present study only 0.70% of patients received PDE-5, which is safe and available. This seems to prove a lack of cardiologists' interest in this group of drugs [22].

The basis for ED prevention is the identification of modifiable risk factors of CVD [22].

In the CHARMS study, a lack of interest in sex was reported by 10% of patients [17].

Patients' expectations from cardiologists seem to be crucial for the treatment of CHD and its comorbidities. In the analysed group, 55.37% of respondents wished their doctor to show an interest in their sexual function, but the percentage of patients who wanted this issue to be addressed during cardiology visits was already about 18.75% smaller. Lack of knowledge about associations between ED and CVD in a wide population of patients results in excluding cardiologists from the group of doctors who are able to help the patient when ED occurs.

In Byrne's study, up to 63% of the respondents wanted these issues to be addressed [19]. The aforesaid results prove a lower level of openness in discussing issues of ED among patients with CHD from the study group.

The study revealed a relatively small number of patients (n = 45) who talked about their sexual health with a cardiologist in comparison to the total number of studied patients. Therefore further research is required. The small group of patients with CHD treated with PDE-5 inhibitors limited further analyses on their application patterns.

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