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SEXUAL ACTIVITY BEFORE AND AFTER CORONARY ARTERY BYPASS GRAFTING

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ABSTRACT

Improved functional capacity after coronary surgery implies that a better level of any aspects of quality of life, sexual activity inclusive, could be expected. The aim of this study was to evaluate the changes in the sexual activity in the patients with coronary artery disease having undergone coronary artery bypass grafting (CABG). The mean age of the contingent of 18 male and 2 female patients was 58 ±5,6 (range 44–66) years. After clinical examination the patients completed a sexual activity questionnaire and an exercise test 20 ±14 (range 4–52) months after CABG. All the patients were married and had permanent sexual partner. At the time of the observation 6 patients (30%) were symptomatic. Data about angina pectoris was available for 5 patients, and one patient experienced symptoms of heart failure. The NYHA class of the patients increased significantly after CABG (1,9 ±0,8 vs 3,1 ±0,5, p 0,001). Only 5 (25%) patients reported increased sexual activity after CABG. Fourteen (70%) patients reported no change in the sexual activity and one (5%) patient had decreased sexual intercourse frequency. After CABG, 16 patients (80%) used beta-blockers. Although the NYHA class of the patients increased significantly after CABG, a few of them experienced an improved sexual activity. Possible reasons were the psychological problems (depression, fear of sexual failure, lack of appreciation and support by the sexual partner), diabetes mellitus, beta-blocker usage, etc. The physician in charge of the CABG patient should ask actively for sexual problems and refer the patient to specialized evaluation when needed.

Key words: sexual life, coronary artery disease, coronary bypass grafting. heart failure, beta-blockers, exercise test

INTRODUCTION

Coronary artery bypass surgery (CABS) alleviates angina pectoris and improves life expectancy and quality of life (QL) in the patients with coronary artery disease (CAD). The major benefit is observed in the patients with stenosis of the left main artery and in three-vessel disease with depressed left ventricular function (11). Patient's physical capacity increases on the average by 20% and, postoperatively, more than two-thirds of the patients are in functional classes I to II (2).

QL contains a set of several aspects such as well being, physical and mental functional capacity, family life, social life, sexual life, and job satisfaction. The improvement in functional capacity after coronary artery bypass grafting (CABG) suggests that a better level of QL and well being could be expected (1). However, clinical improvement could not be associated with positive QL perception (9). The aim of this study was to evaluate the changes in the sexual activity in the patients with coronary artery disease that had undergone CABS.

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MATERIAL AND METHODS

The mean age of the contingent of 20 patients (18 males and 2 females) was 58 ±5,6 (range 44–66) years. After clinical examination the patients completed a sexual activity questionnaire and an exercise test 20 ±14 (range 4-52) months after CABG. All the patients were married and had permanent sexual partner. Table 1 summarized the background clinical and demographic characteristics of the patients.

RESULTS AND DISCUSSION

At the time of the observation 6 patients (30%) were symptomatic. Data about angina pectoris was available for 5 patients, and one patient experienced symptoms of heart failure. The NYHA class of the patients increased significantly after CABG (1,9 ±0,8 vs 3,1 ±0,5, p <0,001). The preoperative sexual activity was compared with the postoperative one after 20 months (Table 2).

Only 5 patients (25%) reported an increased sexual activity after CABG. Fourteen patients (70%) did not report any

Table 1. Patients' clinical and demographic characteristics

Parameters	n	%
Education		
- elementary	5	25
- high school	9	45
- college	6	30
Occupational status		
- white collar	7	35
- blue collar	9	45
- retired	4	20
Residence		
- city	16	80
- village/town	4	20
Coronary risk factors		
- hypertension	18	90
- dyslipidemia	18	90
- smoking prior to surgery	13	65
- diabetes mellitus	6	30
Previous history of myocardial infarction	10	50

change in the sexual activity and one patient (5%) had a decreased frequency. After CABG, 16 patients (80%) used beta-blockers

The results of this study showed that most patients were completely asymptomatic at the time of the evaluation. Despite the significant postoperative increase of the physical capacity a few patients experienced an improved sexual activity.

Postoperatively increased frequency of sexual activity correlated with preoperative cardiac impairment (NYHA class) ($p < 0{,}001$) and return to work ($p < 0{,}01$) (6). Other predictors of sexual problems were diabetes mellitus, male sex, age, education and depression (3,6,8). Fear of sexual failure or fear of a cardiovascular event as a result from sexual activity create anxiety and tension in relationships within the family and lead to avoidance of sexual activity,

Table 2. Frequency of sexual intercourse prior to and after CABG

Sexual frequency	Before CABG n = 20		After CABG n = 20		p
	n	%	n	%	
> 1/ week	3	15	4	20	NS
< 1/ week	6	30	9	45	NS
no activity	11	55	7	35	NS

Herlitz et al. (5) found out an improvement of all the aspects of QL, sexual life inclusive. However, other studies revealed that the sexual activity improved less than other measures (6-9).

Although the patients with more severe clinical symptoms appeared to have less sexual activity after CABG, it was not clear whether this outcome was the result from the lower physical capacity (symptoms of heart failure or of patient's persistent anxiety (6,10).

which can significantly affect QL, cause depression and loss of self-esteem (10). We suggest that the beta-blocker usage can induce erectile dysfunction. Other antihypertensive drugs that act on central neurotransmitter pathways and are associated with erectile dysfunction are methyldopa, reserpin and clonidine (10).

Cardiac rehabilitation after CABG improves all the aspects of QL, sexual life inclusive (4,6,12). The physician in charge of the CABG patient should ask actively for sexual

problems and refer the patient to specialized evaluation when needed (8).

CONCLUSION

Although the NYHA class of the patients increased significantly after CABG, a few of them experienced an improved sexual activity. Possible reasons were the psychological problems (depression, fear of sexual failure, lack of appreciation and support by the sexual partner), diabetes mellitus, beta-blocker usage, etc.

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