Sexual morbidity after myocardial infarction

Chin Cheuk Ngen,* DPM, MRCPsych
Lecturer

David K.L. Quek,† MBBS, MRCP
Lecturer

Samuel B.L. Ong,† MBBS, MRCP
Lecturer

** Department of Psychiatry, † Department of Medicine,*
Faculty of Medicine, Universiti Kebangsaan Malaysia,
Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur

Summary

Sixty five patients were interviewed on an average of 42 months after a myocardial infarction. Using a semi structured interview, they were systematically questioned on their usual sexual activity just before their infarction and at the time of follow up. All were married men with a mean age of 54.4 years and had resumed a normal active life. Forty six (70%) reported a decrease in frequency of sexual intercourse (mean 6.9 times/month before infarction and 0.8 times/month at time of interview, $p < 0.01$). The majority had difficulty in discussing sex with their doctors because of impaired doctor-patient communication, cultural factors and lack of privacy. Discussion concerning sex should be initiated as soon as the patient is stable and pertinent advice is the key to better sexual adjustment after myocardial infarction.

Key words: Sexual functioning, myocardial infarction, sex counselling.

Introduction

The incidence of coronary heart disease and myocardial infarction is on the rise in Malaysia. Those surviving the acute infarction will eventually have to adjust their life style and for many have to return to work as well. One important aspect in survivors of myocardial infarction is in the area of sexual functioning. Sexual dysfunction has been reported to be frequent in patients who had recovered from myocardial infarction.[1,2,3] However these are reports from studies in Western countries. There is a dearth of reported studies on sexual morbidity in survivors of myocardial infarction in Malaysia. The aim of this study is to determine the extent and type of sexual morbidity in a selected group of Malaysians who have recovered from a myocardial infarction and to examine the factors contributing to the sexual morbidity.

Method

Our subjects were patients attending the Universiti Kebangsaan Malaysia Cardiology Clinic and who had recovered from a myocardial infarction.

Case records of patients attending the Cardiology Clinic for the day were checked. The first one on top of the pile of case notes with a previous history of myocardial infarction was called and informed about the study. Informed consent was obtained before the subject was interviewed and included in the study. If the patient refused to participate in the study, then the next case record with a previous history of myocardial infarction was taken and the patient called and asked for consent to participate in the study.

After basic demographic data was obtained (name, age, sex, marital status, occupation and address), the subjects were interviewed using a semi structured interviewing technique: the Clinical Interview Schedule (CIS).[4] The CIS consisted of 10 'reported' symptoms and 12 'manifest' abnormalities. Mandatory questions were asked as well as supplementary ones when necessary. An overall severity score was given at the end of the interview and those scoring two or more were given a psychiatric diagnosis using the International Classification of Disease 9th edition (ICD–9). The CIS is a useful research tool in outpatient studies and has been validated and used successfully in developing countries like India,[5] Brazil,[6] Taiwan[7] and Singapore.[8] The interview takes about 25 minutes for uncomplicated subjects and up to 50 minutes for subjects with psychiatric disorder. An average of 2–3 subjects were interviewed per clinic session.

In addition to the above, a history of the physical illness was obtained as well as a social history concerning family and relationships, job, social habits as well as a sexual history. By this time most subjects were sufficiently at ease to answer systematic questions about sexual relationships. The following were asked: relationship with sexual partner/s, presence of erectile or ejaculatory problems and duration of disability, frequency of sexual intercourse at present, frequency of sexual intercourse just before their myocardial infarction, any opportunity to discuss about sexual matters with their doctors and if not, the reasons why. If the frequency of sexual intercourse was decreased, subjects were asked if they desired more and the reason/s for a decrease in frequency.

Results

A total of 80 subjects were interviewed over a six month period (May–November 1988). Eleven male subjects declined to answer questions on sexual relationship although they completed the CIS. Four others were women and two declined to answer questions on sexual relationship while the other two claimed there was no sexual relationship as one was a widow and the other was separated from her husband. That left 65 men who gave an adequate sexual history.

All 65 men were married and had a mean age of 54.4 (± 10.1) years with a range of 36–79 years. The mean duration of the interval between time of myocardial infarction and time of interview was 42 months. All had resumed their normal daily activities.

Looking at the frequency of sexual intercourse at the time of interview compared to the time before myocardial infarction, the subjects were grouped into four groups – decreased, unchanged, none and increased frequency of sexual intercourse (Table 1). Only one subject reported an increase in frequency of sexual intercourse after infarction while 16 reported unchanged frequency. In these 16, they reported a decrease in frequency in the first 2–3 months following their infarction and discharge from the Coronary Care Unit, but subsequently resumed their usual frequency of sex. Two subjects had no sex before their myocardial infarction and reported none at the time of interview.

Table 1
Frequency of sex at interview compared to before infarction

Frequency of sex	Number of subjects	Mean frequency of sex (times/month)	
		Before infarction	At interview
Decreased	46	6.9	0.8*
Unchanged	16	6.8	6.8
None	2	0	0
Increased	1	4	12

* $p < 0.01$

Forty six (70%) of the 65 subjects reported a decrease in sexual intercourse at the time of interview compared to before their infarction (mean 6.9 vs 0.8 times per month). This is a significant decrease ($p < 0.01$) and is largely accounted for by 23 who had no sex at all since their myocardial infarction.

There was no statistical difference between the mean age of those who reported a decrease in frequency in sex and those who reported unchanged frequency (mean unchanged group 52.3 ± 11.3 years, mean decreased frequency group 54.5 ± 9.3 years, $t = 0.75$, $p > 0.05$). Although the mean duration of the time since the infarction till interview of the unchanged group (46.7 months) was longer than the group with decreased frequency (39.4 months), this was not statistically significant ($t = 0.53$, $p < 0.05$).

The 46 subjects reported that they wanted to ask and discuss about sex with their doctors but most were unable to do so satisfactorily. The five commonest reasons were: (1) most of the time doctors came in groups accompanied by a few nurses and the patient felt too embarassed or inhibited to raise the question of sex in front of so many people (20 subjects (43%)). (2) There was too little time to discuss with their doctor other than about their physical condition (20 subjects (43%)). (3) It was not appropriate for their culture or society to discuss sexual matters with their doctors (10 subjects (21.5%)). (4) 'Sudah tua!'. This rationalisation was given by eight subjects (17.4%) and they were usually given together with reason (3). (5) The fifth commonest reason was that the patient could not bring up the subject because their doctor was an attractive young lady! (six subjects (13%)). In addition, there was one subject who said that he was warned by his doctor when he was recovering from his infarction not to have sexual relationship if he wanted to live. When interviewed, he was asymptomatic, back at work as a tailor for two years and 10 months. Although he was well for three years, he had no sexual relationship at all even though both he and his wife wanted to.

Erectile failure and premature ejaculation as a cause of decrease in frequency of sexual intercourse was uncommon. Only one subject had premature ejaculation while five had failure of erection. Diabetes mellitus was a contributory factor in three subjects with erectile failure.

Almost all subjects were physically well at the time of the interview except one who had unstable angina and reported a decrease in frequency of sexual intercourse at that time. Concomitant disease was found in 24 subjects (Table 2). Of interest are those with hypertension. Fourteen

Table 2
Concomitant physical disease in subjects

Disease	Decrease in frequency of sex	Unchanged frequency of sex
Hypertension	14	3
Diabetes*	4	0
Chronic obs airway dis.**	3	0
Gout	2	0
Peptic ulcer	0	1

* 3 had both diabetes mellitus and hypertension.
** 1 had COAD and hypertension

of the 46 who had decreased frequency of sex were hypertensive and on treatment as compared to three out of the 18 with no change in frequency of sex. Five of the hypertensive subjects with a decrease in frequency in sex were on beta blockers, three of whom had treatment long before their infarction and did not complain of any side effects on sexual functioning. The remaining two were found to be hypertensive at the time of their infarction and were placed on beta blockers at the same time. Although beta blockers have been reported to cause impotence, our subjects on beta blockers did not complain of this side effect. Due to the small number of subjects the contribution of beta blockers to decreased frequency of sex in our sample is uncertain.

As regards to concomitant psychiatric disorders that may alter the frequency of sex, anxiety and depression were the commonest (Table 3). Five subjects had neurotic (reactive) depression and all had decreased frequency of sex. However in all five subjects the depression was related to significant life events that were relatively recent while the decrease in frequency in sex dated since the time of the infarction. Eight subjects had anxiety severe enough to be classified as an anxiety neurosis of which one had unchanged frequency of sex while the other seven had decreased frequency. All date the onset of their symptoms to around the time of their myocardial infarction.

Table 3
Concomitant psychiatric disorder in subjects

Diagnosis	Decreased frequency of sex	Unchanged frequency of sex
Anxiety neurosis	7	1
Depressive neurosis	5	0
Dementia	4	0

However these seven and 11 other subjects who had decreased frequency of sex had unfounded fears about sex that they wanted to discuss with the doctors but did not because of the reasons mentioned above. These 18 (39%) feared that they would over exert themselves during sexual intercourse and may precipitate a 'heart attack'. Some gave this reasoning: they had no sex following their myocardial infarction and now they are well. Therefore not having sex keeps them well! The subjects' spouses tended to reinforce this belief. Twelve (26%) subjects admitted that their spouse refused to or sharply limited sex with them. None of those interviewed admitted to a history of having sexual intercourse just prior to their myocardial infarction.

Discussion

Change in sexual activity is common after myocardial infarction. There is an initial decrease in sex, often coinciding with a period of anxiety and/or depression.[2,3] With recovery and return to normal life, sexual activity is expected to return to normal. However in our sample, 70% had decreased frequency of sex long after they had resumed their usual daily activities. One possible explanation is that the decrease in sex may reflect the normal ageing process. There was no significant decrease in sex when comparing patients after myocardial infarction and a control group in one study.[1] This is not likely in our samples as those who had decreased frequency and those who had unchanged frequency had no significant difference in their mean age. This study would have been ideal if a control group without infarction but matched for age, sex, ethnicity and occupation were included. Our sample may not be truly random as we took the first folder in the pile for interview. However constraints of time, finance as well as human resources precluded this.

Our findings are similar to an American study published 20 years ago in which it was reported that up to 75% of post infarction patients have sexual problems like impotence, decreased libido and diminished frequency of sexual intercourse.[9]

Most of the decrease in frequency of sex was not due to physical disorders but due to a combination of impaired doctor/patient communication, the patients' unfounded fears as well as to cultural inhibitions in our society. It should be emphasised that while our study showed that many had decreased frequency of sex and wanted to have more this does not necessarily imply a decrease in sexual satisfaction.

A surprising finding is that none of the 13 subjects with anxiety neurosis or neurotic depression had experienced these symptoms before the onset of their myocardial infarction. Not all psychiatric symptoms can be regarded as a reaction to the cardiac illness. Lloyd in his study of psychological symptoms after acute myocardial infarction found that 35 out of 100 of his subjects had psychiatric morbidity.[10] However 16 of them had been diagnosed prior to their myocardial infarction and he concluded that psychiatric morbidity in patients with heart disease is not necessarily a result of the disease process. We cannot account for this difference.

Spouses of patients could contribute to the sexual problems if they are not well informed and harbour false beliefs. At least one paper had reported that spouses of patients with myocardial infarction had higher anxiety levels than the patients themselves.[3]

We conclude that sexual morbidity following myocardial infarction in our sample is high (70%) and much of this is due to impaired communication with doctors, cultural inhibitions and unfounded fears of spouses. A private, tactful discussion on sexual functioning in the recovery

period after a myocardial infarction with an informed doctor will certainly result in better sexual adjustment in these patients.

Acknowledgement

We wish to thank Staff Nurse Lim of the UKM Cardiology Clinic for her valuable assistance in retrieving case notes and supplying the subjects of our study.

References

1. Dhabuwala CB, Kumar A, Pierce JM. Myocardial Infarction and its Influence on Male Sexual Function. Archives of Sexual Behaviour. 1986; 15;6;499–504.

2. Fairburn CG, Dickerson MG, Greenwood J. Sexual Problems and Their Management. Churchill Livingstone. 1983; 49.

3. Cay EL. Psychological Problems After Myocardial Infarction. In Advances in Cardiology 29: 108–112.

4. Goldberg DP, Cooper B, Eastwood MR, Kedward HB, Shepherd M. A Standardised Psychiatric Interview for Use in Community Survey. Br J Prev Soc Med 1970; 24: 18–23.

5. Sen B, Williams P. The Extent and Nature of Depressive Phenomena in Primary Health Care. A Study in Calcutta, India. Br J of Psych. 1987; 151: 486–493.

6. Mari JJ, Blay SL, Iacoponi E. Un estudo de confiabilidade de cersao brasiliera da Clinical Interview Schedule. Bulletin of the Pan American Health Organisation. 1986; 100: 77–83.

7. Cheng TA, Williams P, Clare A. Reliability Study of the Clinical Interview Schedule between British and Chinese Psychiatrists. Bulletin of Chinese Social & Neurological Psychiatry. 1982; 8: 54–55.

8. Lim LCC, Lee TE, Boey ML. Psychiatric Manifestations of SLE – A Singapore Experience. In Abstracts of 2nd ASEAN Congress on Psychiatry and Mental Health. Singapore 30 Mac – 2 April 1989: 17.

9. Hellerstein & Friedman. Sexual Activity & The Post Coronary Patient. Archives of Internal Medicine 1970; 125: 987.

10. Lloyd GG, Cawley RH. Psychiatric Morbidity after Myocardial Infarction. Qtr Jr of Medicine. 1982; 51: 33–42.