Erectile Dysfunction in Al-Hilla City Study the Most Common Causes

Emad H. Mahmood Mustafa Makki Ajam Zaid Shakir Kareem
College of Medicine, University of Babylon, Hilla, Iraq.

Received 13 January 2012 **Accepted 27 October 2013**

Abstract

Aim : study of the most common causes of erectile dysfunction in Al – Hilla city.

Patent and method: 300 married male individuals their ages falls between (40 – 60) years old underwent the study. A structured questionnaire requested information concerning general information, sexual activity , smoking , diabetes and hypertension history.

Results : The present study involved 300 married male individuals showed 141 patient complaining of ED and in 159 men not complaining of EDof the 141 ED patients, 65 (46%) were smokers , 40 (28.3%) suffered from diabetes mellitus, 36 (25.7%) had hypertension . Among 159 control men 62 (39%) were smokers , 16 (10%) had diabetes mellitus and 19 (12%) had hypertension.

Conclusion : the probability of developing ED was very high in the presence of smoking, hypertension and diabetes mellitus.

الخلاصة

تهدف الدراسة الى تحليل اكثر اسباب العجز الجنسي في مدينة الحلة ٣٠٠ ذكر متزوج تم اشراكهم في الدراسة والتي كانت على شكل اسئلة توجه لهم تخص معلومات عامة , الفعالية الجنسية , واذا كانوا من المدخنين او مصابين بمرض السكري او ارتفاع ضغط الدم . اظهرت الدراسة ان ١٤١ شخصاً كانوا يعانون من العجز الجنسي في حين ان ١٥٩ لم يعانوا . من هؤلاء ال١٤١ كان ٦٥(٤٦%) من المدخنين , ٤٠ (٢٨,٣%) مصابين بالسكري و٣٦ (٢٥,٧%) مصابين بارتفاع ضغط الدم . من بين ال١٥٩ شخصاً الذين لايعانون من العجز كان ٦٢(٣٩%) من المدخنين , ١٦ (١٠%) مصابين بالسكري و١٩(١٢%) مصابين بارتفاع ضغط الدم من ذلك نستنتج ان احتمالية الاصابة بالعجز الجنسي تزداد كثيراً عند وجود التدخين او مرض السكري او ارتفاع ضغط الدم.

Introduction

Erectile dysfunction is an inability to have or sustain an erection adequate for satisfactory sexual activity for at least three months[1].

It is one of the most common chronic medical disorders in men over the age of 40 In an American study 39% of men aged 40 to 70 reporting some degree of ED[2].

The Massachusetts Male Aging Study indicated that the prevalence of ED was 52% in men aged 40 – 70 years old and was strongly correlated with age [7,8].

The prevalence and severity of the disorder increases with age; men in their 50's are 3 times likely to experience EDthan men in their 20's It is estimated that moderate to complete ED affects 45% of men in their mid-60's, with a further increasing prevalence in older age groups [2,3].

Two-thirds of cases of ED are organic in origin and comorbid conditions should therefore be actively evaluated . Heart and vascular diseases (especially those associated with ED

[2,4]. The combination of these conditions and aging increases ED rick in older men. Other hormonal and metabolic problems including primary and secondary hypogonadism, hypothyroidism, chronic renal failure, and hepatic failure, also negatively impact on erectile function [5]. Substance abuse, such as excessive intake of a known cause of arterio – occlusive disease, is clearly a co – factor and probably an independent etiologic factor itself Penile anatomical defects and Peyronie's Disease may contribute to erectile problems [6].

Psychogenic disorders, including depression, dysphoria , and anxiety states are associated with an increased incidence of multiple sexual dysfunctions including erectile difficulties [6] . Spinal cord injuries, pelvic and prostate surgery and pelvic trauma are less common causes of dysfunction . Iatrogenic ED can be caused by nerve disrupting pelvic or prostate surgery; inadequate glycemic, blood pressure, or lipid control; and many of the medications commonly used in primary care.

Antihypertensives, notably diuretics and central acting agents ,including some of the newer antidepressants, and anti – testosterone hormonal agents. Testosterone levels do decline slightly with age but are only related to ED in the small minority of men who are truly hypogonadal and have low hormone levels [9] .

Patients and Methods

The present study started from 15/2/2009 to 1/4/2009 at Al – Hilla Teaching Hospital and Marjan Teaching Hospital . 300 married male individuals their ages falls between (40-60) years old underwent the study. A structured questionnaire requested information concerning:

1. General information like his age, address, occupation, number of working hours and the number of his children if he has .
2. Sexual activity whether it is low, moderate or good .
3. If he is having sexual dysfunction, ask about if it is in the desire, erection or premature ejaculation.
4. The number of sexual intercourse during the week.
5. Whether he is smoker or not and calculating smoking index .
6. If he is complaining of DM,HT,or other diseases (heart , kidney , liver ,…).
7. Finally we asked if the patient consulted the physician or sought for treatment of impotence and whether they were active or not .

Ethical considerations

1. All information obtained would be used in aggregate .
2. Responses were voluntary under verbal informed consent .
3. The confidentiality and the privacy of their responses were protected .
4. Refusers were not called back in an effort to convert them to participating respondents .
5. The aim of the study was explained to all participants and they would not be harmed in the study .

Results

The present study involved 300 married male individuals showed 141 patient complaining varied from 1 month to 20 months . The mean age og the cases was 50 years old .

About 53% of the ED patients were between the age of (55 – 60) years 18% were between the age of (45 – 50) years ,17%were between the age (50 – 55) years, 12 % were between the age of (40 - 45) years. (Table 1)

Of the 141 ED patients , 65 (46%) were smokers , 40 (28.3%) suffered from diabetes mellitus, 36

(25.7%) had hypertension. Among 159 control men 62 (39%) were smokers, 16 (10%) had diabetes mellitus and 19 (12%) had hypertension. (Table 2)

For patients between (55 – 60) 15 of them sought treatment for impotence, 11 from the patients between (45 – 50) sought treatment , 7 from the patients between (40 – 45) and from patients between (50 – 55) (Table 3)

Table 1 age distribution of men with erectile dysfunction and control men

Age group years	Cases (n=141)		Control (n = 159)	
	No	%	No .	%
40 -45	17	12	49	30.8
45 -50	25	17.8	43	27.2
50- 55	24	17	31	19.4
55 -60	75	53.2	36	22.6

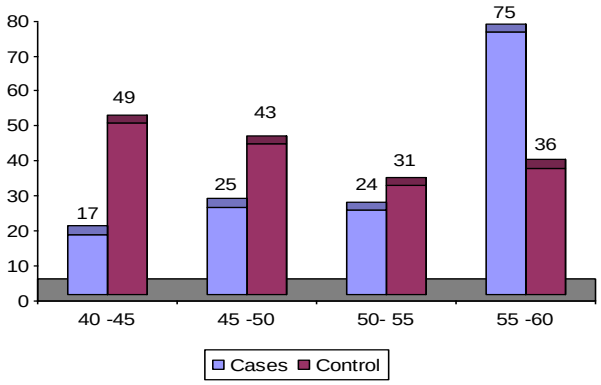

Figure 1 age distribution of men with erectile dysfunction and control me

Table 2 Prevalence of smoking , diabetes Mellitus and Hypertension among men with erectile dysfunction and control men

Risk factor	Cases		Control	
	No .	%	No .	%
Smoking	65	46	62	38.9
Diabetes Mellitus	40	28.3	16	10
Hypertension	36	25.7	19	11.9

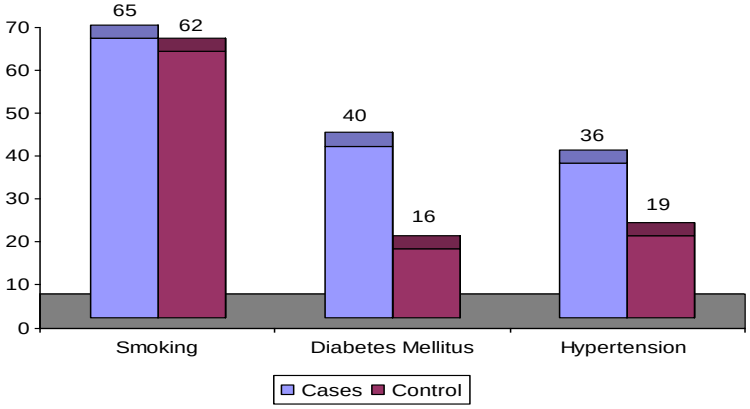

Figure 2 Prevalence of smoking , disbetes Mellitus and Hypertension among men with erectile dysfunction and control men

Table 3 Showing the frequency and percentage of individuals who have sought for the treatment of impotence and whether the treatmen is effective or not in relation with age

Age interval	Treatment		Active		Not Active	
	No .	%	No .	%	No .	%
40 -45	7	18.4	5	13.1	2	5.3
45 -50	11	29	2	5.3	9	23.7
50 – 55	5	13.1	4	10.5	1	2.6
55- 60	15	39.5	8	21.1	7	18.4

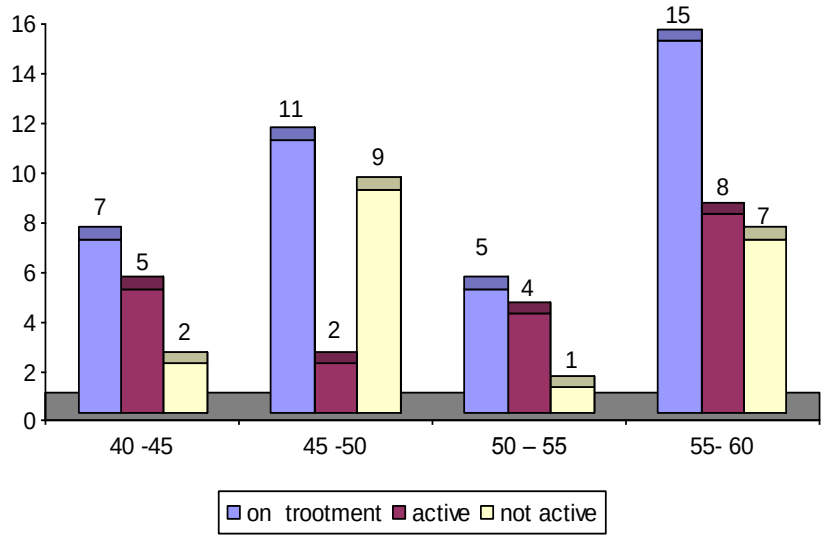

Figure 3 Showing the percentage of individuals who have sought for the treatment of impotence and whether the treatment is effective or not in relation with age

Table 4 Showing a comparison between the frequencies of impotent patients who have Diabetes mellitus , Hypertension or both in relation with age

Age Interval	Diabetes	Hypertension	Both
40 -45	7	2	0
45 -50	7	1	3
50 -55	8	8	1
55-60	8	13	5

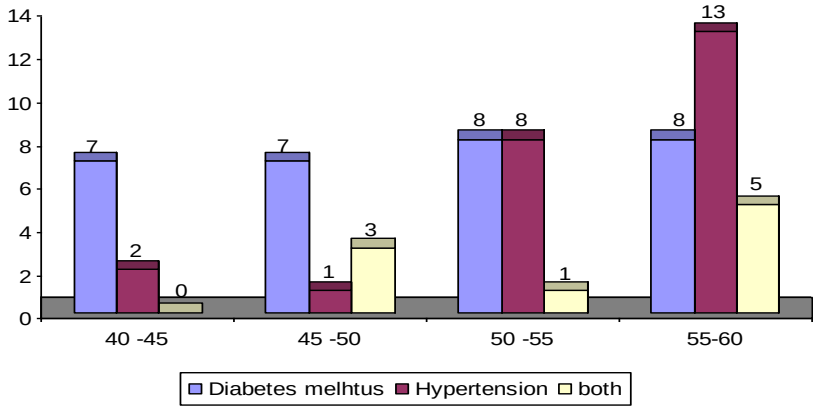

Figure 4 Showing a comparison between the frequency of impotent patients who have Diabetes mellitus , Hypertension or both in relation with age

Discussion

A number of modifiable risk factors are associated with ED, including cigarette smoking, hypertension and diabetes mellitus [10]. ED is a common problem among ageing men and the prevalence of ED increase with each decade of patient age [6]. In the present study ,About 53% of the ED patient s were between the age og (55 -60) years, indicating that age is strongly associated with ED. In H.Zedan et al . about 70% of patient were over age of 40 years[11] , while Feldman et al. analyzed 1290 men in the Massachusetts Male Aging Study and concluded that age eas the Massachusetts Male Aging Study and concluded 6 . Of the patients in the current study About 47% were in the age of (40 -60) years old compared with 59.0% were in the age group 40 - 60 years old in H. Zedan et al. and with 10.8% in the group 60 -80 years old , which is not the same in more developed countries [6 ,11 ,12]. This reflects differences in social and cultural aspects in addition to different life expectancy rates in Al – Hilla city compared to developed countries . It is estimated that 20% of men above the age of 55 yaers in Al – Hilla city seek medical advice for ED probably because they consider this problem as a normal consequence of ageing.

The association between smoking and ED has been reported in numerous studies that reported an increased incidence of ED among smokers [6,13,14] .Longitudinal data from the Massachusetts Male Aging Study showed that the incidence of ED was twice as high among smokers compared with nonsmokers over a 9 – year period [15].There is evidence of a beneficial effect of smoking cessation on ED, esported by 46% of patients complaining of ED compared with 28.7% of controls . This difference could be attributed to differences in study design , age distribution and the smoking index.

Hypertension was detected in 36 patients who represented 25.7% of the total number of cases compared with 11.9 % of the controls According to Ponholzer et al. patients with hypertension developed ED 2 time more than nonhypertensive patients, which is approximately the same of our study [17].

ED is a common complication of diabetes , with a prevalence ranging between 27%and 75%[18] In the current 28.3% of the total number of ED patients had diabetes mellitus compared with 10.0% of the controls .Our study showed that ED was about 2 time more prevalent in diabetic patients than in non – diabetic men which is nearly similar to the result of Rosen RC et al. [19] .

Conclusion

The present study estimated the prevalence of smoking hypertension and diabetes mellitus among patients with ED in Al – Hilla city compared with controls .We found that the probability of developing ED was very high in the presence of smoking , hypertension and diabetes mellitus . The results differ from those in other populations and countries possibly due to differences in cultur , race , health services and methodology. Larger – scale studies on a national basis are needed to survey a greater number of populations for all risk factors associated with ED

References

1. NIH Consensus Development Panel on Impotence . JAMA , 1993 ;270: 83 – 90

2. Feldman H, Goldstein I, Hatzichristou D , et al , Impotence and its medical and psychological correlates : results of the Massachusetts male aging study :

Journal of Urology , 1994 ; 151 : 54 – 61 .
3. Morley J., Impotence : American Journal Medicine , 1986 ; 80 : 897
4. Benet A , Melman A., The epidemiology of erectile dysfunction :Urology Clinics of North America, 1995 ; 22 : 699-709.
5. Wireman M , Casel C . Erectile dysfunction , a multifaceted disorder : Hospital Practice . October 1998: 65 - 90 .
6. Feldman HA et al , Impotence and its medical and psychosocial correlates , Results of the Massachusetts Male Aging Study : Journal of urology, 1994 , 151 – 61 .
7. Wessells H et al , Erectile dysfunction : Journal of urology , 2007 , 177 : 1675 – 81.
8. Bartlik B , Kocsis J , Legere R et al . Sexual dysfunction secondary to depressive disorders : Journal Sexual Marital Therapy , 1999 ; 2(2): 52 – 60.
9. TOP guidelines for the investigations and management of erectile dysfunction : Alberta Clinical Practice Guidelines program , 2010 : 1-11 .
10. Saigal CS et al , Predictors and prevalence of erectile dysfunction in a racially diverse population : Archives of internal medicine , 2006 , 166 : 207 –212 .
11. H .Zedan et al , Cigarette smoking , hypertension and diabetes mellitus as risk factors for erectile dysfunction in upper Egypt : Eastern Mediterranean Health Journal , 2010 , 16 : 281 – 285 .
12. Ponholzer A et al ., Prospective study of risk factors fo erectile dysfunction :in 2869 men using a validated questionnaire : European urology , 2005 , 47 : 80 -6 .
13. Bacon CG e et al ., Aprospective study of risk factors for erectile dysfunction : Journal of urology, 2006, 176 : 217 – 21 .
14. Kupelian V , Link CL , Mckinlay JB ., Association between smoking , passive smoking, and erectile dysfunction , results from the Boston Area Community Health (BACH) Survey : European urology , 2007 , 52 : 416 – 22 .
15. Fedman HA et al ., Erectile dysfunction and coronary risk factors , prospective medicine , 2000 , 30 : 328 -38 .
16. Polsky JY et al ., Smoking and other lifestyle factors in relation to erectile dysfunction : BJU international , 2005 , 96 : 1355 -9 .
17. Rosen RC et al ., Development and evaluation of an abridged , 5- item version of the International Index of Erectile Function (IIEF-5) as a diagnostic tool for erectile dysfunction : International journal of impotence research , 1999 , 11 : 319 – 26 .
18. Fedele D et al ., Erectile dysfunction in type Iand type II diabetics in Italy : International journal of epidemiology , 2000 , 29: 524 – 31.
19. Rosen RC et al., The multinational Men's Attitudes to Life Events and Sexuality (MALES) study. I. Prevalence of erectile dysfunction and related health concerns in the general population : Current medical research and opinion, 2004, 20: 607 – 17 .