Sexual Dysfunction in Female Hypertensives

Basil N. Okeahialam, MBBS, FWACP and Ndudim C. Obeka, MBBCh, FWACP
Jos and Abakaliki, Nigeria

Purpose: Hypertension and its treatment are known to produce sexual dysfunction in males. In our culture, women are not free to discuss issues of sexuality with their doctors. Hence, this phenomenon has not been explored in them. Notwithstanding this, cases occur in practice where noncompliance with dire consequences result from sexual dysfunction. This study was done to determine if any dysfunction existed among women as is commonly reported in males.

Methodology: As part of a larger study on serum uric acid and lipid profile of adult Nigerian hypertensives, we sought information on sexual function in females. One group was newly diagnosed and treatment naïve, while the other was made up of known hypertensives on thiazides. The third group consisted of normotensive age-matched controls.

Findings: Six out of 44 (13.6%) in the first group, five out of 29 (17.2%) in the second group and two out of 43 (4.7%) in the control group reported sexual dysfunction. The commonest aspect encountered was reduced desire for intercourse.

Conclusion: There was a tendency for hypertensive women to have more sexual dysfunction even before treatment than did controls. Larger studies should be undertaken and clinicians should probe this subject if poor compliance is suspected.

Key words: sexual dysfunction ■ hypertension ■ women's health

 From the Department of Medicine, Jos University Teaching Hospital, Jos, Nigeria (Okeahialam) and Department of Medicine, Ebonyi State University Teaching Hospital, Abakaliki, Nigeria (Obeka). Send correspondence and reprint requests for *J Natl Med Assoc.* 2006;98:638–640 to: Dr. B.N. Okeahialam, Department of Medicine, Jos University Teaching Hospital, PMB 2076, Jos, Plateau State, Nigeria; e-mail: basokeam@yahoo.com

INTRODUCTION

Sexuality and its manifestations are said to constitute some of the most complex aspects of human behavior.[1] In females, its expression is bound by societal norms. It is, however, important in intimate sexual relationships. Any dysfunction is therefore likely to impact negatively on such relationships. Hypertension is known to be associated with sexual dysfunction.[2] This phenomenon has been studied more in males; because of the two genders, males are more likely to open up on such intimate subjects. Women in Africa tend to resign to their fate when such dysfunction befalls them. Nevertheless, it builds psychosocial tension in them, as the relationships suffer from the lack of consummation with adverse consequences.[3] Such dysfunction also negatively affects compliance and quality of life.[4] The rate of dysfunction is said to be low,[5] albeit overlooked, in females.[6]

The available reports are based on studies in the more advanced countries. We are not aware of any local African study on sexual dysfunction involving women. We therefore decided to look for sexual dysfunction among our female hypertensives to see the pattern in Nigerian Africans. This should complement works from the west and open up foci of similar studies locally.

METHODOLOGY

Between November 2002 and October 2003, as part of a larger study on serum uric acid and lipid profile in hypertensive adult Nigerians, we sought information on sexual function in female hypertensives. The study was based in Jos University Teaching Hospital and was approved by the hospital ethics committee. The areas inquired about included libido, pain or discomfort during intercourse, and orgasm. There were three groups of patients/subjects in the large study—namely, newly diagnosed and treatment-naïve hypertensives, known hypertensives on thiazide diuretic therapy and a control group of apparently healthy nonhypertensive subjects. The females in these groups constitute the subject of this report.

Group 1 (newly diagnosed, treatment-naïve) subjects had an average of two blood pressure readings of ≥140/90 mmHg on at least two separate occasions. Blood pressure was taken in the standard fashion using a mercury sphygmomanometer. There was no comorbidity, such as diabetes mellitus, sickle cell disease, thyroid disease, liver disease, congestive cardiac failure, ischemic heart disease or stroke of less than six months' duration. They were also not pregnant. Group 2 was made up of previously diagnosed hypertensives on thiazide diuretics. The same exclusion criteria above also applied to them. Group 3 consisted of apparently healthy nonhypertensive females who attended the hospital for minor ailments. Patients in all groups were matched for age.

RESULTS

There were 44 females in group 1, 29 in group 2 and 43 in group 3. The mean age in group 1 was 48.0 ± 12.8 years, 46.4 ± 13.1 years in group 2 and 50.7 ± 10.8 in group 3. The differences did not attain statistical significance.

Six out of 44, or 13.6%, of patients in group 1 admitted to reduction in libido. Four out of 29 or 13.8% of patients in group 2 also had a reduction in libido. Only two out of 43, or 4.7%, of the controls (group 3) reported a reduction in libido. The differences between groups did not attain statistical significance. Only one patient reported dyspareunia. She was in group 2, the known hypertensives on thiazide diuretic treatment. In sum (for all aspects of sexual dysfunction), group 1 had 13.6%, group 2 had 17.2% (5/29) and group 3 (controls) had 4.7%. This shows a greater tendency for hypertensives in either group (1 or 2) to have reduced libido when compared with nonhypertensive controls. Among the hypertensives, the tendency was greater for hypertensives on thiazide therapy than the newly diagnosed treatment-naïve group.

DISCUSSION

There have been few studies on sexual dysfunction in female hypertensives.[4] The importance of this as an adverse effect of medications cannot be overemphasized, as it constitutes a barrier to blood pressure control.[7,8] To overcome this obstacle and try to attain optimal control of blood pressure, it behooves all clinicians to enquire about this. This is more so when it has been found that even before initiation of treatment, women with hypertension had difficulties achieving sexual satisfaction as well as poor lubrication.[9] In the experience of one team member (BNO), noncompliance with catastrophic consequences may derive from sexual dysfunction even in females.

This study, albeit on small numbers, shows that there was a greater tendency for hypertensive women with or without treatment to have low libido compared with age-matched controls. The difference, however, did not achieve statistical significance. This may require a larger sample to demonstrate. Only one patient reported dyspareunia consequent upon inadequate lubrication. She was on thiazide diuretics, a group of drugs known to worsen sexual problem.[10] The results here should be taken as preliminary and show only the tip of the iceberg. Females are more reserved in our culture and are less likely to discuss such sensitive subjects. In our experience, they generally tend to parry questions on this subject and speak philosophically. It could also be that the general clinic settings with nurses, attendants and, occasionally, medical students do not give them the desired level of privacy to open up on such a sensitive matter.

The sexual response cycle in women is similar to a large extent with that of males, hence antihypertensives should cause similar adverse effects.[10] During excitement and in response to parasympathetic signals, more blood flows into the pelvis and breast.[1] This causes an increase in size of the erectile tissue as well as increase in mucus secretion[11] and prepares the vagina for penile reception. If the small caliber vessels are narrowed by hypertensive arteriosclerosis, the above would not occur. Also, if in treating hypertension the blood pressure drops rapidly beyond that necessary to fill the pelvic vessels, a similar consequence would be expected. The stress and frustration attending this situation could create an adverse biochemical milieu (high catecholamine and cortisol levels) that would impair blood pressure control as well as exacerbating the sexual dysfunction.[12]

We suspect that as in males, female hypertensives are burdened with sexual dysfunction. This has not been borne out here, because differences did not achieve statistical significance. The difference may require a larger sample to emerge, although cultural inhibitions on women making discussion of sexuality a taboo could have affected the figures. Currently, we are in the process of designing a larger study on the subject. To preserve total quality of life as well as ensure compliance, physicians should no longer shy away from discussing the subject. If the women perceive their sexual dysfunction to be due to antihypertensive treatment, it could be a barrier to blood pressure control.

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REFERENCES

1. Morley JE, Kaiser FE. Female sexuality. *Med Clin North Am.* 2003;87:1077-1090.
2. Grimm RH, Grandits GA, Prineas RJ, et al. Long term effects on sexual

function of five anti-hypertensive drugs and nutritional hygienic treatment in hypertensive males and females. *Hypertens*. 1997;29:8.

3. Rosen C. Prevalence and risk factors of sexual dysfunction in men and women. *Curr Psychiatry Rep*. 2000;2(3):189-195.

4. Prisant LM, Carr AA, Bottini PB, et al. Sexual dysfunction with anti-hypertensive drugs. *Arch Intern Med*. 1994;154(7):730-736.

5. Harms W. Unlike men, women's sexual dysfunction does not increase with age. www.news.uchicago.edu/releases/02/021011/sexualdysfunction.shtml.

6. Burchardt M, Burchadt T, Anastasiadis AG, et al. Sexual dysfunction is common and overlooked in female patients with hypertension. *J Sex Marital Ther*. 2002;28:17-26.

7. Duncan LE, Lewis C, Smith CE, et al. Sex, drugs and hypertension: a methodological approach for studying a sensitive subject. *Int J Impotence Res*. 2001;13:31-40.

8. Douglas JG, Ferdinand K, Bakris GL, et al. Barriers to blood pressure control in African Americans. *Postgrad Med*. 2002;112(4):51-70.

9. Heart Information Centre. High blood pressure (hypertension): causes, diagnosis, treatment and prevention. http://your-doctor.com/healthinfocenter/medical-condition/cardiovascular/hypertension.html.

10. Duncan L, Bateman DN. Sexual function in women. Do antihypertensive drugs have an impact? *Drug Saf*. 1993;8(3):225-230.

11. Guyton AC. Female physiology before pregnancy and the female hormones. In: Guyton AC, ed. Guyton's Textbook of Medical Physiology. 8th ed. W.B. Saunders Co. (Harcourt Brace Jovanovich Inc). Philadelphia, London, Toronto, Montreal, Sydney, Tokyo. 1991:899-914.

12. Kochar MS, Mazur LI, Patel A. What is causing your patient's sexual dysfunction? Uncovering a connection with hypertension and anti-hypertensive therapy. *Postgrad Med*. 1999;106(2):149-157. ■

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