Sexual Problems in Diabetes

Part I: Sexual functions in diabetic women —

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Curriculum Vitae

Dr LI Robertson studied at Cape Town University where he received the MBChB in 1954. He did some post-graduate training at McCord Zulu Hospital (Durban), at St Monica's Home (Cape Town), received the MFGP(SA) in 1975 and has been in Private Family Practice in Durban since 1957. He has a wide interest in different fields of medicine, and at the moment still holds the following posts: Senior Medical Officer – Diabetes Dept (Addington Hospital), Medical Director – Child Guidance & Research Centre (Durban/Westville), Medical Director – Institute of Human Sexuality. He also makes time to serve on several committees. He is Vice-chairman of the council of SA Academy of Family Practice/Primary Care; he is an elected member of the SA Medical and Dental Council and gives time to many other committees serving the community. Dr Robertson has presented many papers at Medical Conferences, has published several scientific papers and contributed to two medical textbooks. He is married to Barbara and they have 4 children.

Summary

This paper focusses on research relating to sexuality in diabetic women – a field which mainly concentrated on men. There seems to be only minor differences between diabetic and non-diabetic women in the field of sexuality, which is not the case with men. Noteworthy is that women complain about the subjective quality of their sexual relationship whereas men are concerned about the mechanistic aspects such as ejaculation or erection.

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KEYWORDS

Diabetes Mellitus; Female; Sex Disorders; Sexual Dysfunctions, Psychological

It is a sad but not unexpected fact that most studies on sexuality in diabetes have concentrated on men, and this paper will focus on the limited research relating to sexuality in diabetic women.

Menstruation

Diabetic women show a slight delay in physical maturation compared with their non-diabetic counterparts, and tend to have less regular cycles. Many diabetic women experience a change in insulin requirements about the time of menstruation and this varies from slightly increased requirements in 20% to a decrease in about 10%. These changes are probably hormonal, though some women feel nauseous and eat less whilst others get a craving for sweet foods. Scott (in Diabetic Medicine 1987) found that insulin sensitivity as measured with the Biostator or artificial pancreas was unaffected by the menstrual cycle.

Psychosexual development

A high incidence of delay in psychosexual development has been reported and is greatest the younger the patient at diagnosis.

Genito-urinary infections

Pruritus vulvae is a common presenting symptom of diabetes. Vaginal infections, especially candidosis, are very common in poorly controlled patients and the irritation and pain can interfere with the enjoyment of intercourse. Vaginal warts are not uncommon, and vaginal herpes may result in ketoacidosis through its systemic upset. Time will show whether HIV infection is likely to be more common or severe in diabetic patients. Urinary tract infections including asymptomatic pyuria plague those with autonomic neuropathy with incomplete bladder emptying.

Fertility

In the early days of insulin therapy, so few women were well controlled that many suffered from amenorrhoea and subfertility due to debility and general ill-health. This is certainly not the case today although one might expect it to be so due to the increased incidence of irregular cycles and pelvic infection. In

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practical terms fertility is not significantly less than in non-diabetics, and in view of the fact that pre-conception control is of such importance, contraception and planned pregnancies at the time of optimal control should be the goal.

Sexual responsiveness

Unlike men, women with diabetes rarely complain of sexual problems. Kolodny reported a reduction in

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orgasm in diabetic women but his was a hospitalised sample and unrepresentative. Ellenberg found no difference in diabetic women with or without autonomic neuropathy. Jensen found minor differences especially in those with peripheral neuropathy.

Tyrers was the most comprehensive study in that it examined 82 IDDM women, 14 of whom had symptomatic autonomic neuropathy, whilst 16 had abnormal autonomic function tests without symptoms and 50 had normal autonomic function, and they were compared with 47 non-diabetics from a family-planning clinic. A psychologist interviewed all and rated spontaneous sexual interest, non-genital arousal, orgasm and vaginismus on a 6 point scale. The only one of these ratings in which the diabetic group differed significantly from the controls was vaginal lubrication, the diabetic group having more individuals at the two extremes, ie "inadequate lubrication" or "always adequate".

Now, the female psycho-physiological change most directly comparable to penile erection is vasocongestion of the vulva and vagina with associated vaginal lubrication. One might therefore expect abnormalities of lubrication especially in those with autonomic neuropathy. But this was not the case. The two most severely affected patients, both of whom died soon after the study from sudden cardiorespiratory arrest of the type that patients with autonomic neuropathy are prone to, appeared to lubricate normally. Schreiner-Engel also looked at a group of 23 NIDDM subjects and found a poorer relationship with the sexual partner

Women focus on the subjective quality of their sexual relationship; men on the mechanistic aspects

than in the control group which seemed to be related to their poorer sexual body image, possibly due to overweight.

A study in our diabetes unit in 1983 revealed that, out of a total of 267 women, only two, both non-insulin-dependent-diabetics, complained of reduced vaginal lubrication, but it was significant that both of them were on the tricyclic, imipramine, for painful sensory neuropathy.

Thus there seem to be only minor disturbances in sexual function in diabetic women in contrast to men. There may be sex-related differences in the way the autonomic nervous

Even severely affected female diabetics appear to lubricate normally

system controls genital responses. It may also be, as will become clearer when I discuss sexual dysfunction in male diabetics, that our assumption that erectile problems in diabetic males are usually due to autonomic neuropathy is incorrect.

But the likeliest reason is that erection in the male is an all-or-nothing phenomenon; any impairment may generate anxiety which can further inhibit the erectile mechanism, whereas women focus on the subjective quality of their sexual relationship.

In our sex-problem clinic it is noteworthy that most men complain about the mechanistic aspects of sex such as erection or ejaculation, whereas most women complain of inadequate enjoyment and not about inadequate lubrication or orgasmic failure.