How I Manage ...
The Treatment of Impotence

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Introduction

Dr. Farrugia was my predecessor as editor of this journal and Secretary for Information on the College council, until he was elected Mayor of Zebbug and felt the pressures of office. He has contributed a lot of time and effort to College activities, and continues to run a busy family practice in his home town. This paper was presented as a "How I manage " talk at one of our CPDs. – The Editor

In this presentation, I will share my personal views on the treatment of the sexual disorder, impotence.

Introduction

As some of my colleagues did, you may wonder why did I choose such a topic? I feel that in Malta it is high time that the medical profession takes a more professional approach to sexual disturbances. Malta lacks the facilities of specialised centres or of a sexologist. The undergraduate medical curriculum may speak for itself, in that it never tackled sexual disorders with orientation towards medical treatment. I would like to make a few general comments.

The approach to the sexual complaint is frequently awkwardly handled by the physician, and by the patient. The patient may be inhibited from describing important sexual problems through shyness, embarrassment, guilt or feelings of inadequacy. On the other hand, the doctor may feel uncomfortable, may disapprove or may fail to ask the right questions.

The present day openness about sexuality in the media does not necessarily mean that individual patients are better educated regarding sexual matters, nor more willing to initiate discussion of sexual complaints. In this respect I also believe that locally, doctors rarely inquire about this health problem during their history taking. Sexuality is part of our promotive health care, and we are in duty to educate our patients.

Sexual complaints call for strict confidentiality and trust. Due to a more developed doctor-patient relationship at the level of the family doctor, this is a more common presenting complaint at the primary rather that secondary care level. Usually such a patient attends the clinic unaccompanied, and comes up with the problem only after having raised other minor problems as a preamble.

Our general approach must be one which respects the patient's dignity. History taking should make use of only scientific terminology when referring to sexual activities and organs. A hurried approach to such problems may evoke a hostile response, especially if a psychiatric referral is discussed. Tact is required, even in a busy clinic. Referral should be tailored to the nature of the problem and to the life style and personality of the patient. Some patients prefer to discuss intimate details of a sexual problem with you, their own family doctor.

On the other hand, many patients want a quick remedy which, unfortunately, we cannot provide. Comprehensive programmes, such as described by Masters and Johnson are not readily accepted. Counselling is a therapeutic tool in this health problem, as in many others. If the family doctor is in difficulty to provide this, he must still make every effort to keep in touch with the patient. The evaluation of the efficacy of the treatment programme, and the provision of support and a reassuring attitude is vital in the management of sexual disorders. The sexual problems of the elderly and of homosexuals are not well understood and are overlooked by many doctors. These two categories of patients need more attention.

Clinical Presentation

At this point I wish to discuss this clinical presentation.

> *A single 37 year old male presents at the clinic complaining of erectile impotence in the presence of his partner. He feels helpless and is frustrated, as this problem has been increasing over the last three months. He gives a past history of high cholesterol and a family history of diabetes. He has social discord and occasionally abuses of alcohol. He has also noticed two penile warts.*

Male sexual dysfunction, often termed impotence, may manifest in different ways: loss of desire, inability to achieve or maintain erection, premature ejaculation, absence of emission and inability to achieve orgasm. These complaints may be secondary to other chronic disorders, for example of the urogenital or

endocrine systems, or the result of psychological or psychiatric disturbance, or both.

The case history describes a young adult who has developed impotence gradually, progressing from intermittent failure to inability to sustain an erection in the presence of his partner, and consequent failure to complete intercourse.

The central issue in the evaluation of impotence is to separate instances due to psychological factors from those due to organic causes, and this distinction can be made on the basis of the history.

History-taking

Psychogenic impotence occurs in a setting of stress, which may be social, economic or occupational. The symptoms may start against a background of depression or anxiety. This disorder results in a complex interaction between physical, emotional and social health, and this symptom has to be evaluated in the context of the relationship between the patient and his partner/partners. One must inquire about factors such as disinterest in the sexual partner, fear of sexual incompetence, or deviant sexual attitudes. An understanding of the patient's lifestyle and daily habits may provide clues to the diagnosis. One must establish the health status of the partner. Fatigue, anxiety, stress, accidents, surgical procedures, bereavement, etc. may affect sexual behaviour acutely or chronically.

Typically, sufferers have good erections in private and during sleep, and may masturbate, but cannot perform in the company of their partners. Nocturnal erection or nocturnal penile tumescence (N.P.T.) occurs during REM sleep, and averages 100 minutes per night. If N.P.T. can be confirmed from the history, the dysfunction is probably psychogenic.

Organic impotence correlates with increasing age and is slow to develop. The causes may be

- **endocrine**, such as testicular failure or hyperprolactinaemia
- due to **drugs** such as antihistamines, antihypertensives, tranquillisers, alcohol and illicit drugs such as heroin
- **neurological** such as diabetes mellitus, pelvic surgery, anterior temporal lobe lesions, or tumours and lesions of the spinal cord
- **vascular** disease includes Leriche syndrome
- **penile trauma**
- **Peyronieís disease**
- previous **priapism**

The case history under study seems to be more probably a case of impotence due to psychological problems.

The physical examination

Although the history is indicative of a psychogenic cause for impotence, the patient may be reluctant to accept reassurances without a thorough physical examination and investigation.

One must pay particular attention to the vascular and neurologic status of the lower limbs. The peripheral pulses and the penile pulse are palpated, but the absence of the latter in the flaccid state is not clinically significant. Neurological examination of the lower limbs, with assessment of muscle power, sensation to various modalities including vibration, and reflexes is carried out. One tests sensation in the perineal region, anal sphincter tone, and the bulbocavernous reflex.

In the examination of the genitalia, one looks at the size and consistency of the testes. Softening and atrophy suggest a primary testicular disorder, and this is usually accompanied by profound changes of body habitus with loss of secondary sexual characteristics. The penis is examined for indurations or plaques, found in Peyronieís disease, and for gross anatomical malformations which the patient may be unaware of or conceal. Occasionally patients may have misconceptions or feelings of shame about their bodies, and should be reassured during this part of the examination. Two warts are noted in this particular case, but the rest of the examination is unremarkable.

Investigations

Measurement of serum testosterone in the absence of feminization or hypogonadism is seldom helpful. However, the serum prolactin level and blood glucose are mandatory. If the history denotes occasional alcohol excess a serum gamma-GT is helpful, as liver disease is unlikely with a normal level. Rarely, hypothyroidism causes impotence, but this is worth considering in elder males.

Our patient suffers from hypercholesterolaemia. This is a cardiovascular risk factor, and should be investigated as part of our screening of male patients, who tend to consult their family doctor rather less frequently. If there is an indication in the history or examination that a vascular cause is likely, the patient should be referred to a specialist for Doppler studies or arteriography.

A new diagnostic clinical test, which is also useful for treatment and is easily performed in the clinic by the family doctor, involves the intra-cavernosal injection of prostaglandin E_1. The doctor injects a 5µg dose of PGE_1 using an insulin syringe into the lateral aspect of the shaft of the penis at the 2 o'clock or 11 o'clock position. A good response to the 5µg dose indicates good function of the organ, and suggests a neurogenic or psychogenic cause

for impotence. Higher doses, up to 60µg, suggest other organic causes. This test is not in common usage. PE_1 is a safe and effective drug, but is stable only at 4° C.

Specialised centres may also make use of N.P.T. measurements through the use of computerised electronic tests, and dynamic stress tests to measure blood flow. Discussion of these tests is beyond the scope of this paper.

Treatment

In my limited personal experience as a family doctor, some sexual problems resolve spontaneously during the evaluation process. Referral is usually difficult for the patient, because it implies a transition to the care of another physician after having confided an intimate health problem with his family doctor. An eager patient may lose motivation if referred elsewhere. Referral depends on the genuine interest of the family doctor in tackling impotence, on the doctor-patient relationship, and on the aetiology of causative medical illness. In the evaluation and follow up appointments, the doctor must ensure that he has enough time to listen attentively and if need be counsel the patient.

Personally speaking, I believe that this case presentation may be adequately managed by a family doctor, as it manifests as a reactive psychogenic disorder amenable to counselling as therapy. If the patient had more deep-seated problems, he might be better managed by a specialist such as a psychiatrist. As an adjunct to therapy, I will prescribe a short-acting anxiolytic, preferably a non-addictive one that does not require a control card. Anti-depressants such as the newer RIMA (reversible inhibitor of MAO A type) or SSRI (selective serotonin re-uptake inhibitor) types may be prescribed if necessary.

Medical therapy with androgens offers little more than placebo effect except in cases of hypogonadism. If blood tests reveal a prolactin secreting pituitary tumour, surgical removal or bromocriptine therapy usually results in return of potency.

The opportunity to educate this sexually active patient should not be missed. Questions should be discreet and non-judgmental. Sexually transmitted diseases in general should be discussed, and preventive measures highlighted.

His verrucae need cautery, and this may be performed easily at the clinic.

This case does not require surgical intervention. However, other cases due to aortic obstruction or priapism may be cured by such surgical procedures as end-arterectomy and shunting of the corpora spongiosa, respectively.

In refractory cases, self-injection with PGE_1 is ideal. This is not without its side effects. If the patient is diabetic and the cause is diabetic neuropathy, one may consider surgical implantation of a penile prosthesis. The silastic rod only prevents buckling during intercourse, but inflatable prosthetic devices exist that simulate an erection.

Conclusion

In this presentation I have tried to describe the management of a health problem that requires not only clinical skills, but also one must rely heavily on interpersonal relationship with the patient in diagnosis and management. As well as discussing my personal views and how I would manage this case, I have highlighted problems and lack of local facilities in dealing with such cases, whilst explaining the various modes of therapy.