Clinical Algorithms

Erectile impotence

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Erectile failure is a cause of considerable distress for many men.¹ It may also be a presenting symptom of a physical or psychiatric illness such as diabetes mellitus, arteriosclerosis, or depression. It therefore deserves careful assessment.

Sexual response, particularly erectile function, is essentially psychosomatic. The most difficult task for the clinician is to get the relative contributions of psychological and physical factors into perspective. In most cases both are important.

Erectile function becomes less efficient with increasing age, presumably an effect of aging on the subtle vascular and neural mechanisms. Not surprisingly therefore, erectile problems are also age related. Various physical factors may impair erectile function, in particular factors affecting the neural control or vascular supply of the erectile tissues. Pharmacological effects are also common, especially from antihypertensive and psychotropic drugs. Whereas such "organic" factors may impair erection, the psychological reaction to this impairment may result in the erectile failure being much more pronounced than it need be on physical grounds.

History

A careful description of the problem is required in terms of erection, ejaculation, spontaneous sexual interest or appetite, and the quality of the relationship with the sexual partner. Problems with ejaculation must first be excluded as erectile failure may be secondary, improving when the ejaculatory difficulty is resolved. Premature ejaculation is sometimes mistakenly seen as an erectile problem because of the rapid loss of erection that follows it. Many men with genuine erectile problems have a history of primary premature ejaculation, but the nature of this connection is not yet clear. Late onset premature ejaculation may be secondary to erectile failure; the stimulation time required for erection may be prolonged while that for ejaculation is not. This may create the impression of premature ejaculation.

Absent or delayed ejaculation requires careful description. Does the problem occur only intravaginally or only in the presence of the partner? What happens during masturbation and during sleep? Does orgasm occur without ejaculation (a "dry run" orgasm may be drug induced or due to a neurological defect) or is there evidence of retrograde ejaculation in the urine after orgasm?

Other questions may include, is the erectile failure complete? Are full erections obtained at any stage? If so, at what point do they start to fail? Loss of erection on attempting vaginal entry is usually psychogenic but occasionally results from a postural effect in some-

one with certain vascular abnormalities (for example, the "pelvic steal" syndrome).² Are erections deformed or painful in any way, suggesting Peyronie's disease? Do erections occur on waking?

Erections that occur on waking represent the last sleep erections of the night, and, though their frequency diminishes with advancing years, the occurrence of a full erection at such times is evidence of intact peripheral erectile mechanisms. Unfortunately the absence of full erections during sleep or on waking is of less diagnostic importance. Similarly, normal erections during solitary masturbation but not in the presence of the partner, or with one partner but not another, are suggestive of a psychogenic cause, but again absence of full erections in such circumstances is of little diagnostic importance.

Assessment of spontaneous sexual interest or appetite is crucial though difficult. Loss of sexual interest that clearly follows the development of erectile failure is of little diagnostic importance; some men understandably react to failure in this way. Loss of sexual interest that clearly precedes the erectile problem, although it is most often psychogenic, may result from endocrine abnormalities. The most direct effect of androgen deficiency or hyperprolactinaemia in men is a loss of sexual interest. Erectile failure in such cases may result from a psychogenic reaction to the loss of interest.³

An assessment of the sexual relationship is important. Any conflict or resentment in the relationship may be sufficient either to cause or to maintain the sexual difficulty. Sexual problems in the female partner are often crucial in causing erectile failure in the man. This is particularly so in older men whose partners have lost much of their spontaneous sexual interest and enjoyment and who are not inclined to initiate lovemaking or even directly stimulate the man at a time when his erectile responsiveness is less robust and requiring more tactile stimulation. The extent to which couples can talk about their sexual feelings and anxieties is often crucial.

A careful medical history is important with particular attention to drug use and alcohol intake. The most convincing pharmacological effect is the inhibition of ejaculation, commonly produced by α blockers, adrenergic neuron blocking drugs (such as bethanidine), and some major tranquillisers and antidepressants (such as monoamine oxidase inhibitors and clomipramine). Erectile problems occur less commonly with such drugs, and it is not certain whether this is a direct pharmacological effect or secondary to other effects. In the treatment of hypotension methyldopa may cause loss of sexual interest and diuretics may interfere with erection, although the pharmacological mechanism is not fully understood. Anticonvulsants, digoxin, metoclopramide, and cimetidine all produce endocrine effects that may cause loss of sexual interest.¹

Cigarette smoking may well be important in its link with vascular disease. Evidence of claudication in the legs or buttocks should be sought.

Physical examination

In addition to routine examination, particular attention should be paid to the blood pressure and peripheral circulation (for example, femoral bruits, peripheral pulses). Evidence of hypogonadism, such

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as body hair, gynaecomastia, and testicular size, should be looked for. Careful examination of the penis may show difficulty in retraction of the foreskin or indurated plaques as evidence of Peyronie's disease. With a history of deformed erection it can be helpful to lend the patient a Polaroid camera to photograph the penis when erect. The glandipudendal (bulbocavernosus) reflex may be impaired, though the diagnostic importance of this is not yet clear.⁴

Investigations

Any evidence of hypogonadism or recent loss of sexual appetite warrants endocrine assessment, in particular measurement of plasma testosterone, gonadotrophin, and prolactin concentrations. This should be done routinely in men over 50 presenting with sexual difficulties as relative androgen deficiency is more common in this age group and its sexual effects are not yet adequately understood.

Measurement of penile blood pressure with a small inflatable cuff and Doppler probe may show a penile systolic pressure much lower than the brachial, suggesting penile arterial insufficiency.

Measurement of sleep erections (nocturnal penile tumescence) may be helpful, but facilities for sleep laboratory investigation are seldom available. Portable devices for use in the patient's home are more accessible, but their reliability is open to question. Similarly, there are a number of disposable devices, such as bands that break under the pressure of a full erection, which can be given to the patient to use at home. Once again, their reliability and validity is not certain, but evidence of a repeated normal response with such devices is probably of diagnostic value.

Other methods of investigation that are much less generally available include psychophysiological testing in response to erotic stimuli, arteriography,⁵ "artificial" erection, and xenon wash-

out.^{2,6} Their proper place in normal clinical practice awaits adequate assessment.

Treatment

Psychological methods remain the mainstay of treatment, even when physical factors are also concerned.¹ Most physical causes of erectile impairment are irreversible, whereas the associated psychological reaction may be helped by counselling, restoring at least part of the function and improving the quality of the sexual relationship. There are occasional physical lesions that can be corrected. Androgen deficiency is easily treated with androgen replacement and hyperprolactinaemia with bromocriptine. Iatrogenic effects of drugs are important and potentially reversible. Surgical provision of prosthetic erection with penile implants is becoming more widely used. Most commonly used are semirigid Silastic rods, but inflatable devices are also available.⁷ Vascular surgery is being explored but it is as yet in an early developmental stage with an uncertain future.² Effective pharmacological methods of treatment are not available, but with further developments in our understanding of the neurotransmitters involved in normal erection pharmacological treatment remains a possibility for the future.

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MATERIA NON MEDICA

Just their names

"Namashkar,* Vinay Ji." The words of chaste Hindi correctly pronounced in a sweet voice sounded in my ears like a soft shehnai.† The grip on my arm sent a current of electricity through every part of me. Who would hold my arm with that possessive and affectionate grip? I turned.

A well proportioned body clad in a well fitting light pink suit patterned with bright red roses. A thick growth of long black hair dangling down the back with a sharply contrasting snow white rose bud pinned to it. Broad forehead with a small black dot shining against a wheaten complexion unadulterated by cosmetic blemishes; thin, soft lips, their natural pink with no dark red coating of oily paints. A light pink silk scarf wrapped around the neck merged so imperceptibly with the skin that I realised what it was only when it was blown by a current of air.

And there it was: an ugly scar running across the lower front of her neck. I knew her. I knew her very well. She was "my first thyroid."

I still remember it all. I was relaxing in my room after the operation when I received an urgent call that "today's thyroid" was serious. What could it be? Bleeding under the wound and respiratory distress? Must be. Complications may occur with anyone but why in my first ever case?

My guess was right. There was no choice but to perform an emergency operation. Then and there all the stitches were removed to let the collected blood drain out. She improved immediately and remained well thereafter; but she had paid a heavy price for it. Her scar was not as good as we initially planned it to be: we had assured her it would be thin and almost invisible. How I wished there was no mirror in the hospital ward as I noticed her stand in front of one and look at her scarred neck.

What surprised me most was that she remembered my name, even after almost two years. But what was her name? Did I know it even when she was with us? Probably not. We recognise and remember "cases." For us they are bed numbers, clinical profiles, and diagnoses. We do not know, nor do we remember, patients, the human beings or their names. I shall always remember "my first thyroid" but I will never know her. The way I kept staring at her embarrassed her, and she had already left.

*Indian salutation.

†A melodious Indian musical instrument.

I rushed back to the hospital. The doctor on duty was surprised to see me on a Sunday evening. "Come on, doctor, let's go round the ward," I said, "but please don't tell me anything about the patients, tell me just their names."—VINAY KUMAR KAPOOR, New Delhi, India.

In a monastery garden

Reading through the second list (Appendix B) of items which, it is proposed, will no longer be available on NHS prescription via the Family Practitioner Service after 1 April 1985 creates anxiety as well as wonder. As a hospital doctor, unfamiliar with some of the more obscure preparations, one is concerned about the future. Will the removal of "Father Pierre's Monastery Herbs" mean that there will be a group of constipated monks, or are they meant for some other purpose? Perhaps a controlled trial in the monastery could persuade the DHSS to relent before the deadline.

Taxi drivers seem unfairly discriminated against when "Cabdrivers' Linctus," diabetic and adult, together with their nasal decongestant tablets, are scheduled for removal. Will we now see fleets of coughing and spitting cabbies on the verge of diabetic ketosis? Some other remedies stimulate the imagination. Although "Herbal Bronchial Cough tablets (English grains)" have been removed, can we still have these from Scotland or Wales, and if so, why? Does the removal of "Jackson's All Fours Cough Mixture" mean that patients are allowed to drink it standing up in future? and what is the "Hi-g-ah Tea?" it sounds rather like the old fashioned advertisement for a certain meaty beverage. I wonder if Nurse Sykes was consulted about the removal of her powder and regret I have never tested "Scott's Husky Biscuits."

As a rheumatologist I have not yet had the chance to use "Manna Herbal Rheumapainaway Tablets" and now I never will. How much more efficient these names sound than the more conventional non-steroidal anti-inflammatory tablets. "Sine Off Tablets" were obviously meant for newscasters and disc jockeys, but no longer—where will it end? I expect our patients will survive; in any case it could be one glorious April Fool.—A J SWANNELL, Nottingham.