

Erectile Dysfunction

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Erectile dysfunction, otherwise known as impotency, affects more than 30 million men each year, yet only about 200,000 seek help from a physician. Impotency remains largely unrecognized simply because most men do not discuss sexual problems with their doctors. In addition, many physicians do not ask or are uncomfortable dealing with the subject. Erectile dysfunction is defined as the inability to sustain an erection well enough to perform intercourse and ejaculation.^[1] While almost all men will experience some degree of sexual difficulty at one time or another, only those who are unable to have successful intercourse 75 percent of the time are considered impotent. Contrary to popular belief, aging is not an inevitable cause of impotency. It does, however, take elderly men longer to develop erections and the force of ejaculation is diminished.^[2]

Conventional medicine usually addresses erectile dysfunction issues by prescribing a drug regimen or surgery. Oral medications such as Erecaid or testosterone are rarely effective unless the condition is due to low testosterone levels. Viagra, Cialis and Levitra which act to relax corpus cavernosal smooth muscle and facilitate erections, are not without their side effects. Penile injections of Papaverine or Prostaglandin E₁, which affect penile blood flow, can result in prolonged erections necessitating other drug therapy to counter act its effects. Additionally, the therapy can cause burning and eventual fibrosis of the penis. Lastly, malleable or inflatable prosthesis' are used in severe cases, requiring surgical implantation. These prosthesis' often need to be surgically re implanted, are uncomfortable and subject to periodic failure.

Erectile dysfunction can be broken down into primary and secondary impotency. Primary causes are rare and may be associated with low androgen levels, genetic defects and severe psycho-pathology. Secondary impotency is much more common and, as the name implies, results from something else such as diabetes, arteriosclerosis, neurological disorders, psychological issues, prolonged stress or previous surgery to the genitalia. Blood pressure medications and antidepressants may also lead to impotency, especially in the elderly.

Dietary factors, largely ignored by conventional medicine, also fuel the problem as men with diets high in caffeine, sugar and alcohol experience more erectile dysfunction, as do men who smoke and use recreational drugs.^[3] Psychological causes account for the majority of impotency complaints. A skilled and sensitive physician may often uncover this during an interview and suggest corrective measures.

Men experience three types of erections:

- * Reflexogenic erections are induced by tactile stimulation of the genitals. Men with lesions of the cervical or thoracic spinal cord (paraplegics) are still able to have this type of erection. A small number of men with complete transection of the spinal cord can also have erections which are psychogenically induced.
- * Psychogenic erections are induced by visual or memory associations.
- * Nocturnal erections occur during rapid eye movement (REM) sleep and may take place anywhere from three to six times a night, lasting from 20 to 40 minutes. Generally,

nocturnal erections begin with the onset of puberty and diminish in intensity, duration and frequency later in life.

Erections during arousal and intercourse are often achieved as a combination of reflexogenic and psychogenic and a deficit in one or both areas can lead to impotency.

Diagnosis

By combining clinical history, physical exam and laboratory tests, a doctor can generally determine the nature of a patient's impotency. If a man has a normal erection with foreplay but loses it upon intromission (entrance into the vagina); has a normal erection with some partners but not others; or has a normal erection with masturbation but loses it with a partner, chances are the impotency is psychogenic.

While a variety of diseases are associated with impotency, arteriosclerosis and diabetes are two diseases which most commonly lead to impotency. Both affect the blood flow into the penis and make it more difficult to achieve and sustain an erection. With time, the condition may become permanent and require surgical implants, injections or penile vacuum pumps. With proper treatment of the underlying diabetes or atherosclerosis however, the impotency can be reversed.

The so called "stamp test" (putting a ring of tape or stamps around the penis and seeing if it is broken in the morning) shows if a man can have an erection at all. The snap gauge, a device which fits around the penis, is more commonly used to determine a psychogenic problem, but doesn't rule out other causes such as arteriosclerosis or diabetes.^[4] Laboratory tests including a penile arterial pulse wave analysis, plethysmography and arteriograms help determine if a physical condition such as arteriosclerosis is behind the impotency. Serum and salivary testosterone levels measures also help find out if enough "male" hormone is available.

Dietary Treatment

The best way to correct impotency is to treat its primary cause and vitamins, minerals, herbal and homeopathic medicines can help. Which remedies to use and how long they will take to work depends on the type of dysfunction, so therefore a diagnosis of the cause of the dysfunction is needed.

As with any genital-urinary tract condition, a good nutritional program is a must. Most impotency problems respond to nutritional therapy, be they of a psychological or physiological nature. For instance, caffeine and tobacco are stimulants, yet both also relax muscles and deplete nerve endings of neurotransmitters, making it more difficult to maintain an erection. Alcohol and recreational drugs have similar effects and ultimately promote impotency. Prolonged use of drugs and alcohol can lead to depression as well as be a sign that it is present. Vitamins and minerals, which are essential for erections to occur, are depleted with extended use of tobacco, caffeine, sugar, alcohol and recreational drugs.

Allergies to food and other substances rarely lead to impotency unless they cause discomfort in the genital or lower urinary tract and thus interrupt normal function. Allergies should be considered only as a last resort when all other possible causes are ruled out.

Studies show that high cholesterol also contributes to impotency. An increase in erectile dysfunction was noted in a group of 3,250 men ages 26 to 85 years in relationship to their serum cholesterol. For every mmol/liter of cholesterol increase above

the normal range (normal = 3.63 to 5.18), a greater risk of impotency has been shown.[5] The authors concluded that high levels of cholesterol and low levels of HDL cholesterol were important risk factors for the development of impotency.

Supplementation

Nutrients such as vitamins C, E and zinc are essential to a man's normal sexual function.[6] All are needed to form both sperm and seminal fluid and are found in especially high levels in the prostate gland. Diets high in vitamins, minerals and antioxidants from fresh fruits and vegetables help maintain vascular integrity and sufficient blood flow, and prevent lipid peroxidation.[7] Lack of vascular flow and integrity diminishes the filling of the corpus cavernosum resulting in flaccidity of the penis. Lipid peroxidation from free radical formation decreases hormones and neurotransmitters needed for normal erectile function. Raw pumpkin seeds are an especially good source of zinc and the essential oils that are needed by prostate gland and seminal fluid.[8]

Botanical Medicines

Botanical medicines offer many of the same therapeutic benefits as drug therapies, without many of the severe side effects. In contrast to drug therapy, herbal medications take longer to bring about a result, due in part to the subtler action of plant-derived medicines or dosage. Larger doses of herbal medicines are initially prescribed to reach therapeutic levels. Once the medication has a therapeutic effect, the dosage can be lowered until the condition has resolved. In my experience over the past 20 years prescribing for a variety of male genito-urinary conditions, herbal medicines have consistently corrected the problem and restored normal function. In some cases where severe pathology was present, the herbal prescription allowed the person to attain a higher level of function not thought previously possible.

* In several studies, Ginkgo (*Ginkgo biloba*) caused increased peripheral blood flow both in normal, healthy subjects and those with arteriosclerosis. [9,10] For instance, 60 mg per day of ginkgo extract increased penile arterial flow in a group of patients who had not responded to penile papaverine injection. Half of the 60 study participants regained potency within six months.

* *Coryanthe yohimbe*, an alpha 2 antagonist, has been shown to increase libido and the latency period between ejaculations. It also has been shown to enhance erectile function in patients with diabetic neuropathy. [11] Additionally it also has a positive effect on depression and thus alleviates the impotency often associated with it.[12] While Yohimbe has many positive effects, self medicating or overdosing can result in anxiety, aggressive behavior, hypertension and possibly death. This herbal medicine should only be prescribed by a physician familiar with its effects.

* Siberian (*Eleuthrococcus senticosus*) and Korean (*Panax*) ginseng's aphrodisiac [increases sexual desire] properties have been prized for centuries. Called an adaptogen, it seems to target any bodily system that needs nutritional support resulting in a higher production of energy and a normalization of function. Thus, the person is better able to achieve and maintain an erection. [13] The American counterpart *Eleuthrococcus*

senticosus, doesn't have quite the same stimulating properties and is felt to be safer for long-term use.

* *Strychnos Nux vomica* is often used in small doses and acts as a central nervous system stimulant. which increases libido and potency. More often *Nux vomica* is used in the homeopathic dose due to its narrow therapeutic range as an herbal preparation. Botanically it must be used in the hands of a skilled prescriber, because it can cause severe central nervous system dysfunction, muscle spasms, vomiting and diarrhea, decreased respiration's and coma.

* *Equisetum* or horsetail is especially useful if impotency is due to prostatic enlargement or improper nutrition of the genital urinary tract. Horsetail is high in selenium, a nutrient that older men often lack. An intact and optimally functioning prostate gland is needed not only for the packaging and delivery of semen, but also for the biochemical and mechanical aspects of erectile function.

* *Chimaphila umbellata* or *Pipsissewa* has been touted by Herbalists, Eclectic and Naturopathic Physicians as an overall restorative for the male genital urinary tract. It stimulates the appetite and has been found to be useful in older persons, who are not eating properly and therefore lack essential nutrients. It also acts as a genital-urinary tract tonic, similar to Ginseng.

* Saw palmetto (*Serenoa serulatta*) is a general overall medication that works well for impotency particularly if included with other medicines as it helps to enhance the actions of other herbs.[15] Saw palmetto acts to maintain the proper hormone balance in the prostate gland which is needed for optimal sexual function, especially in older men.

* *Chamaelirium luteum* or *Helonias* (Unicorn root) is also an excellent for "sexual lassitude" and infertility. This herbal medication has been used for pelvic atony associated with childbirth and excess sexual activity. It is often used in conjunction with other herbal medications. [16]

Homeopathic Medicine

After treating a large number of men with impotency, I have found that a homeopathic prescription, coupled with other therapies, is very useful for erectile dysfunction. This is especially true if the condition is primarily due to psychological causes. The homeopathic medicine, coupled with herbal medicines or nutrient therapy, stimulates the body to make the needed corrections.

In my experience erectile dysfunction is a condition whose treatment is quite amenable to natural therapeutics, enjoying a high rate of success. Successful treatment requires that the physician and patient address the underlying causes of the disorder rather than palliating the symptoms. Implementing diet and lifestyle changes as well as educating the patient as to the causes of the disorder are essential for long term treatment and prevention.

As society attains a greater awareness of the issues surrounding erectile dysfunction, more emphasis will be placed on research and education. Addressing it at an earlier date will ultimately result in a greater rate of success.

References:

1. Ackerman, M., et al. "Impotence: Help for Erectile Dysfunction Patient Care" pgs 22 to 56 March 15, 1994
2. Mulligan, T. Geriatric Sexual Dysfunction: A Rational Approach to a Sensitive Topic : Virginia Geriatric Education Center, 1990
3. Kahn, J. Smoking May Increase Risk of Impotence Medical Tribune Jan 1995 (from the American Journal of Epidemiology 1994)
4. Yoshikawa, T M. D., et al. Ambulatory Geriatric Care : 252-58: Chicago, IL Mosby, 1993
5. Wei, M., et al. "Total cholesterol and high density lipoprotein cholesterol as important predictors of erectile dysfunction" American Journal of Epidemiology, 40:930-37, 1994.
6. Mbizvo, M., "Seminal plasma zinc levels in fertile and infertile men" S. African Med. Journ 71:266, 1987.
7. Halliwell, B., et al. "Lipid peroxidation, oxygen radicals cell damage and antioxidant therapy" Lancet xxvolume number zz 1396, 1984.
8. Schmid, R. Traditional Foods Are Your Best Medicines: Ocean View Publications, Stratford, CT 1987.
9. Brown, D. "Ginkgo biloba: Phytotherapy review & commentary Townsend Letter for Doctors pg 1041 Dec. 1991.
10. Sikora, R. et al. "Ginkgo biloba extract in the therapy of erectile dysfunction" J. Urology 188: 1989.
11. Reid, K., et al. "Yohimbine for treatment of impotence in diabetes" New England Journal of Medicine 1221: 1981.
12. Morales, A., et al. "Double blind trial of yohimbine in treatment of psychogenic impotence" Lancet pg 421 August 1987.
13. Farnsworth, N., et al. "Eleutherooccus senticosus: Current status as an adaptogen" Econ Med. Plant Res. 1:156-215, 1985.
14. Ellingwood, F., American Materia Medica, Therapeutics and Pharmacognosy Eclectic Medical Publications: Portland, Ore. 1983.
15. Murray, M. "Liposterolic extract of serenoa repens in the treatment of benign prostatic hyperplasia" Phyto-Pharmica Review 1: 5, Aug. 1988.
16. The Eclectic Materia Medica, Pharmacology and Therapeutics H. W. Felter M.D., Eclectic Medical PublicationsPortland, Ore. 1983