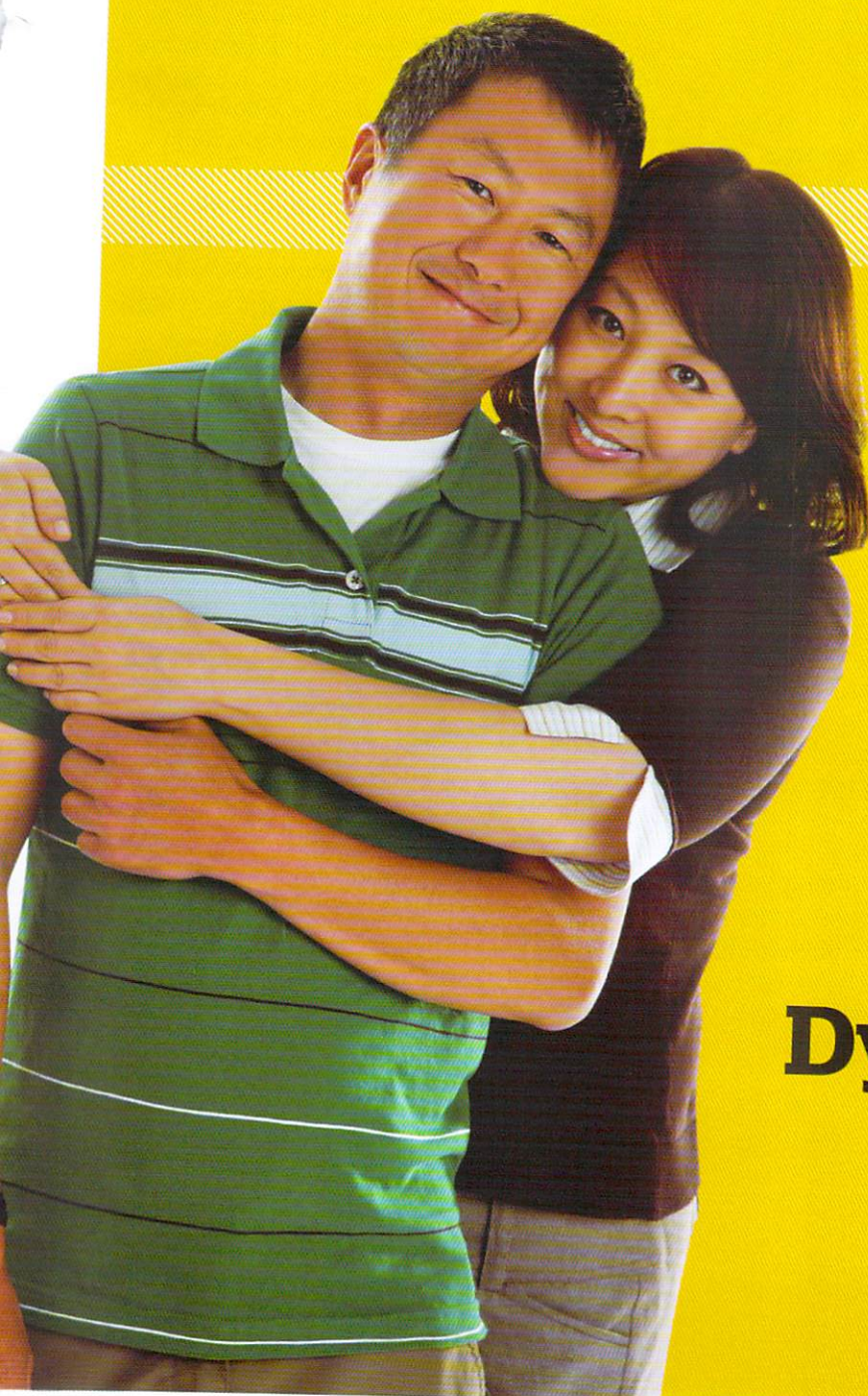


There are a variety of treatment methods for Erectile Dysfunction (ED), a common condition afflicting men today. Read on to understand the modes of treatment and effectiveness of each of the treatment options.



After the  
magic pill,  
**what else  
is there  
for Erectile  
Dysfunction?**



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**E**rectile Dysfunction (ED) is a very common condition that afflicts men of all ages. It is present, in varying severity, in about 30% to more than 50% of men above the age of 40 years.

With the widespread advertisement and marketing by the makers of

Viagra, Levitra and Cialis, which are pills prescribed for ED, more men and their partners have a greater awareness of this issue, and a larger number of them are coming forth to seek treatment.

It is not uncommon nowadays to see a patient with ED in the

Urology specialist clinic who has already tried one or more types of the pills mentioned earlier, and the response was not ideal. In that situation, are there other modes of treatment available and how effective can they be, when the pills have failed?

This article will address these issues and I hope it will encourage men with this problem to look further for more effective treatment.

### **Sexual Counseling & Therapy**

Majority of cases of ED are caused by both medical and psychological factors such as anxiety, depression, sexual naivness etc. If present, treatment should be multipronged, involving both the doctor and the sexual therapist.

The doctor will perform the medical evaluation and initiate treatment, while the sexual therapist will supplement by providing sexual counselling and techniques to overcome the psychological and behavioural issues. Both of these services are now available in Tan Tock Seng Hospital (TTSH).

## Pills

These pills are collectively known as phosphodiesterase-5 inhibitors (PDE5Is) and they are usually prescribed on an on-demand regime, that is, as and when the patient wants to have sexual intercourse.

The pill has to be taken at least 30-45 minutes prior for it to be effective, and stimulation will be required to kick-start the effect. For some people, the need for planning and scheduling can be counter-productive and it can take the joy of sex away.

To overcome this, there is a new method of treatment where a smaller dose of Cialis, 5 mg, is taken on a daily basis. This allows for a constant presence of the drug within the blood stream so that erection and sex can be more spontaneous.

The common side-effects experienced include facial flushing, headache and muscular ache while the more serious adverse effects such as giddiness and chest pain are rare. These PDE5Is cannot be taken together with nitrates.

## Penile Injections

Penile injections have been available even before the advent of PDE5Is, and they are a good alternative to the pills.

The injectable drug commonly used in Singapore is Alprostadil, and there are Papaverine and Phentolamine as well. These drugs can be used singly or in combination, on an on-demand regime.

The needle used is very short and narrow, and the injection is performed at the shaft of the penis into the cavernosal tissue. The drug usually takes about 15-30 minutes to work, and sexual stimulation is preferred to initiate the effect. The pain experienced is quite mild and the side-effects, such as bleeding, penile pain, prolonged erection etc. are uncommon.

These drugs work via a different pathway from the PDE5Is, and they can be effective even though the response to the pills has been poor.

They should not be given to patients with a history of

prolonged erection, or bleeding tendency due to medications, coagulopathy and other causes.

## Vacuum Erection Device

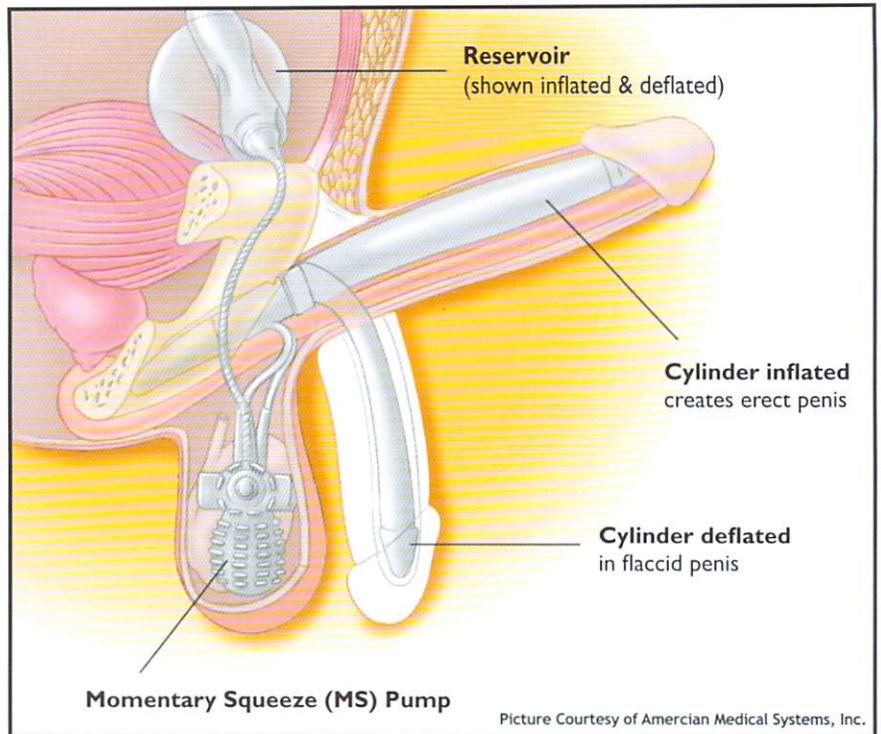
The penile vacuum device can effect an erection by placing it over the penis and activating a graduated pump to gently create a vacuum within the device, thereby drawing in blood to fill the distensible cavernosal tissue. A medical grade silicon band is then placed at the base of the penis to maintain the erection for the duration of the sexual intercourse, and it should not be left there for more than 30 minutes.

With some practice, it is a fairly easy to use appliance that does not rely on the effect of a drug. Needless to say, the man or his partner must have the dexterity to manipulate the device and the silicon band.

It should be avoided in men who have bleeding tendencies. The adverse events due to the device is uncommon. They include bruising or bleeding beneath the skin due to excessive negative pressure



⤴ Inflatable Penile Implant



generated, a slightly cooler penis which may be unpleasant for the partner, and prolonged erection.

**Penile Implants**

Should all else fail, penile prosthesis surgery is an alternative worth considering. Again, an erection is effected by mechanical means and is not reliant on the effect of a drug. The sensation and

the ability to achieve orgasm and ejaculation remain the same after the surgery. There are two types of penile implants - malleable and inflatable.

The malleable penile implant, as the name suggests, can be bent and it can be straightened. The implant is surgically inserted into the penis in a simple and short

operation. The resultant outcome is a constantly erected penis that can be straightened for sexual intercourse, or it can be bent and tucked away in the trousers at other times.

The inflatable type of penile implant is also surgically inserted and it consists of three components - the cylinders

which are inserted into the penis, the saline reservoir which is placed in the retropubic space and the pump which is placed within the scrotum for easy access.

To achieve an erection, the man just has to locate and repeatedly squeeze the pump in the scrotum to cycle the saline from the reservoir into the penile cylinders, thereby inflating them. After the sexual intercourse, he then squeezes the deflation button in the pump to release the saline back to the reservoir and thereby deflating the cylinders.

The surgery is slightly more complex and it takes a longer time to perform as compared to the malleable implant. The patient usually stays for a night and he goes home the next day with the implant deflated. He can start cycling the implant two weeks after surgery and start using the implant after six weeks.

These implants can be left within the body permanently. The two key complications following implant surgery are infection and mechanical failure. The

incidences are in the region of about 2% and 5% respectively. Should either of these occur, the implant can be easily changed. They do come with warranty.

### Low Testosterone State

Blood testosterone level should preferably be checked in men with ED, especially if they have concomitant lack of libido. This test should be performed in the morning between 7am and 11am, as there is a diurnal variation of the serum testosterone level. Should the level be low, that is less than 8 nmol/L, testosterone replacement therapy can be offered.

In summary, the treatment of ED goes beyond just pills. At times, a combined approach incorporating sexual therapy and testosterone replacement therapy can yield better outcomes. Should these measures fail, there are other effective alternatives such as penile injections, vacuum erection device and penile prosthesis surgery. These options should be actively discussed with patients so that they do not lose hope when the pills fail them. **GPBUZZ**



#### Dr Simon Chong

Dr Simon Chong is a Consultant in the Department of Urology at the Tan Tock Seng Hospital (TTSH). He obtained his basic medical degree at the Queen's University

of Belfast in UK, and went on to obtain his MRCS and MMed in Surgery before completing his urology training.

His subspecialty interest is in Male Sexual Dysfunction/Andrology and Male Infertility. He did his subspecialty training with Dr David Ralph in the University College Hospital and the London Clinic in Harley Street, and his team in the Institute of Urology in London, UK where he learnt procedures such as penile prosthesis implantation, various surgical techniques for Peyronie's disease, phalloplasty and organ-preserving procedures for penile cancer.

He is actively involved in Men's Health and Andrology in Singapore where he has organised and lectured in GP and public forums. He is also a Clinical Senior Lecturer of the Yong Loo Lin School of Medicine of NUS, and Programme Director of the Urology Residency Programme in TTSH.