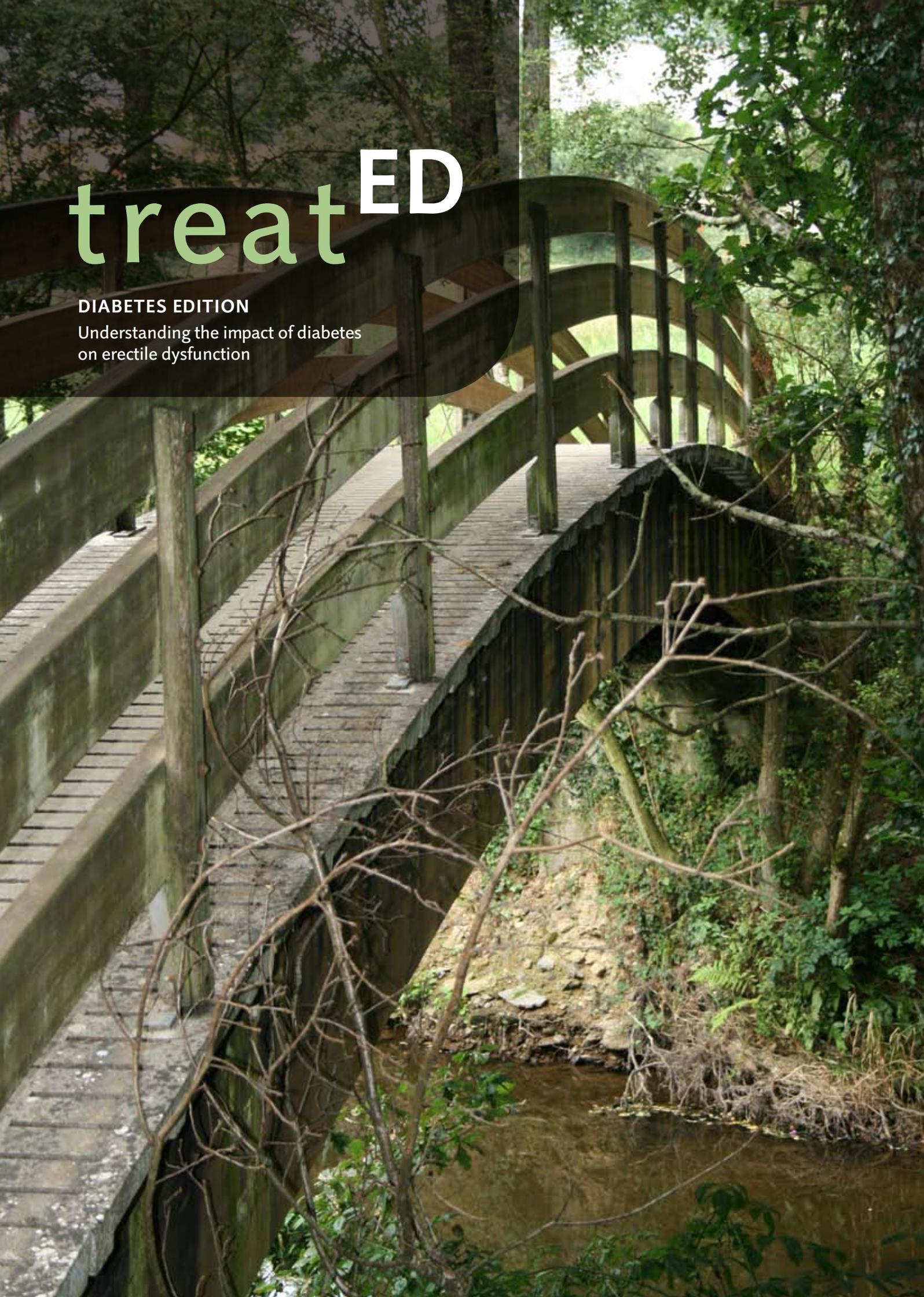


treat^{ED}

DIABETES EDITION

Understanding the impact of diabetes
on erectile dysfunction



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IMPORTANT: The content of this brochure has been developed by medical experts using available medical evidence and should be used as a guide only. Treatment advice specific to your situation should be sought from your doctor. A thorough medical assessment should be conducted before any treatment is commenced. If there is anything in this brochure that requires explanation please speak to your doctor.

The content of this resource has been reviewed and approved by Diabetes Australia (1300 136 588) and Impotence Australia (1800 800 614). These are independent, not-for-profit consumer organisations that support the development of this type of resource to achieve ongoing improvements in treatment and care for men and their partners.

Introduction

A diagnosis of diabetes can have a wide range of impacts on your life, but there are a few basic things that can make your life easier.

Being diagnosed early, understanding the condition, having open discussions with your doctors and having access to a range of effective treatment options make this serious condition easier for individuals to manage.

Likewise, erectile dysfunction (ED) can be similarly managed.

This brochure is specifically designed for men with diabetes (Type I and II) because ED is a common complication of diabetes.¹

It is important to appreciate good control of diabetes can reduce the risk of ED.^{2,3} There is also a range of effective options available to treat ED.

While information about ED is abundant, getting credible and factual information is important. Your best source of medical information is a doctor, pharmacist, diabetes educator or sexual health counsellor.

A team of medical professionals specialising in a range of men's health issues, including erectile dysfunction and diabetes, have provided their expertise to develop this brochure.

- Professor Doug Lording is an endocrinologist/andrologist at Cabrini Health, Victoria.
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DISCLOSURE

Costs associated with the development of this resource have been funded by Eli Lilly Australia. Eli Lilly, Diabetes Australia and Impotence Australia have reviewed the content of this brochure.

About ED

Erectile dysfunction is a treatable medical condition and is more common than many men realise.

ED is the medical term for erection problems and is defined as the inability to achieve or maintain an erection firm enough for sexual activity.

Ageing is the most common cause of ED.

At least one-third of males aged 40 years have some degree of ED and this number continues to increase with age.⁴

Most often there is a medical condition (e.g. diabetes, obesity or cardiovascular disease) underlying ED.

This condition may also be associated with psychological issues (e.g. anxiety, stress or depression) or lifestyle factors (e.g. physical inactivity, excessive alcohol or smoking) which can all affect ED.

Therefore early recognition of ED is important as it may indicate other medical conditions.

About diabetes and ED

Men with diabetes have different ED risks compared to men without diabetes.

These risks are covered in this booklet so that you are aware of them and most importantly, so you can take action to manage ED.

Men with diabetes have a greater risk of ED than men generally - more than 50 per cent will develop ED within 10 years of the onset of diabetes.^{2,3}

This is because elevated blood glucose levels, which cause blood vessel and nerve damage in other parts of the body, can do the same damage to the tiny blood vessels in the penis.

Conditions frequently associated with diabetes, such as obesity, high blood pressure and high cholesterol, also increase the risk of developing ED.

Diabetes medications do not cause ED.

ED occurs at an earlier age in men with diabetes and tends to be more severe.^{3,5,6} It can emerge as early as their 20s, affecting young men who may otherwise not have given ED a second thought.

Occasionally 'retrograde ejaculation' also occurs in diabetes. In this condition, semen goes backward into the bladder instead of going forward. This can be a particular issue for young men with diabetes who may be contemplating starting a family, as fertility may be affected.

The risk of ED does increase with the duration of diabetes – the longer you have diabetes, the greater the risk of experiencing ED.^{3,5}

While it is important to be aware of the risks of ED when you have diabetes, it is equally important to be aware that effective treatment is available.

Erections can be improved and the best chance of doing so is with early intervention. If your doctors or diabetes educators haven't discussed ED with you yet, ask them about it – the sooner, the better.

Additional general information on ED and approved ED treatments can be obtained by contacting:

www.impotenceaustralia.com.au

www.andrologyaustralia.org

Managing diabetes, managing ED

If you needed another reason to manage your diabetes to the best of your ability, here it is - good control of diabetes may improve ED and probably reduces the likelihood of getting it in the first place.

Here are a few things you can do to self-manage diabetes (there's more in the lifestyle section⁷):

- Understand your diabetes and treatment;
- Monitor blood glucose levels - take action if required;
- Eat regular meals; and
- Have regular check-ups.

Your annual check-up is a good time to ensure your sexual health is on track too.

Ask your doctor or diabetes educator any questions you may have about ED. While you may feel embarrassed about this, they won't.

ED is a common medical condition so it's highly unlikely you're going to say anything they, as healthcare professionals, haven't heard before.

A 'hypo' (hypoglycaemia) can occur at any time, including during sex, so ensure you have a sugary soft drink, fruit juice or jelly beans close by.

Treating ED

Involving a medical professional in treating ED is essential.

There are a number of ED treatment options available. If you're curious about any of them, the safest approach is to ask your doctor about it.

Your doctor will be able to tell you what treatments have been approved by the Australian Government's medicines agency - the Therapeutic Goods Administration (TGA). These treatments have met a number of strict guidelines for safety, effectiveness and tolerability.

As a man with diabetes, your ED treatment options are the same as any other man who has ED from other causes. You can however, expect some differences in the results.

Some ED treatments can interfere with other therapies and medical conditions so it is vital that you provide your complete medical history to the person prescribing your treatment.

This will enable the doctor to ensure the recommended treatment is appropriate for you.

General considerations for men with diabetes

People with diabetes are at an increased risk of heart disease and in diabetes particularly, it can often be present without any symptoms.⁸

Therefore, a fitness assessment by your doctor may be required before resuming sexual activity to ensure your heart is in good working condition. This is recommended irrespective of any ED treatment.

1. ORAL TREATMENTS (TABLETS)

Your doctor will often start you on tablets. There are three tablets approved for use in Australia – Cialis® (tadalafil), Levitra® (vardenafil) and Viagra® (sildenafil) – and they are known as PDE5 inhibitors.

How do they work?

Oral medications allow greater blood flow to the penis, enabling an erection to be achieved with sexual stimulation.

There are two types of oral medication available – one taken daily or one taken ‘on-demand’.

Discuss with your doctor which is the best medication to suit your sexual lifestyle.

Men won't have a permanent erection while the medication is in their system – sexual stimulation is required.

The ‘on-demand’ tablets (taken before sexual activity) can begin to work as early as 20 - 30 minutes after taking them. It is, however, advisable to allow 60 minutes before attempting intercourse the first time you use them.

If you're finding the tablets aren't working after only one or two doses, keep trying. At least six to eight attempts at the right dose are required before doctors consider the tablets have not worked.

Exclusions

Oral treatments should not be used by men also taking medicines known as ‘nitrates’, which are used for the treatment of angina (chest pain) or other heart conditions.

A sudden and serious drop in blood pressure can occur if you take both medications at the same time.

Availability and cost

The cost of ED medications can vary slightly. For a prescription of four ‘on-demand’ tablets, the cost is generally between \$65 and \$80 (2009).

Some private health insurers may cover some of the cost of prescription medications. Repatriation Health Card holders may also be reimbursed.

Side effects

The most common side effects are headaches, facial flushing, blocked nose, indigestion and muscular pain.

A condition known as NAION (damage to the optic nerve) is extremely rare and has only been seen in men with multiple vascular (related to blood vessels) risk factors. While there is no direct proven link to any of these oral medications it is another reason to ensure you see a doctor to assess your risks before providing any treatment.

Considerations for men with diabetes

Oral ED medication works well in many men with diabetes although the success rate is not as high as the general population.⁶

2. INJECTIONS

How do they work?

A drug is injected into the penis each time an erection is needed. This is usually achieved within about 10 minutes and lasts for 30 - 60 minutes.

Direct sexual stimulation is not required as this drug works by a chemical response that directly opens up the blood vessels in the penis.

Most men can learn how to inject themselves correctly although patience is required - it may take between 5 and 10 attempts to master the technique.

It is recommended to start injections at a lower dose and then work your way up, to minimise the chance of a prolonged erection (priapism), which can cause permanent damage.

Most doctors recommend a maximum of three injections per week.

Side effects

- Pain in the penis either from the injection itself or the medication it contains.
- A prolonged erection. Any erection lasting more than four hours with this type of medication requires urgent medical intervention.
- Thickening can occur at the site of the injection, which can then scar and distort the shape of the penis.

A follow-up appointment with a doctor to have the penis checked and to ensure that the injection is being delivered correctly is recommended.

Availability and cost

Caverject Impulse® (alprostadil) is an injection that is available in a powder form and needs to be mixed into a solution just before use.

Combinations of different medications can be mixed together and may be recommended by your doctor if you are not achieving a satisfactory response.

Injections are not available on the Pharmaceutical Benefits Scheme. Some private health insurance funds may cover some of the cost and men with Repatriation Health Cards may also be reimbursed.

Considerations for men with diabetes

Poor manual dexterity, poor eyesight or being overweight or obese, all complications of diabetes, can make injecting difficult. You may need additional instruction from your doctor to assist with this.

3. VACUUM PUMPS AND PENILE RING

To ensure these devices are being used appropriately, it's best to have them properly explained and appropriately fitted. A doctor can tell you where to purchase the devices and advise you on using them properly.

A vacuum pump may be used by men who have difficulty getting an erection. A penile ring, typically made of elastic rubber, may be used to sustain an erection.

The vacuum pump is made up of a clear plastic cylinder and a pump that may be manually or battery operated.

The vacuum pump is placed over the penis and, as air is taken out of the cylinder, blood is drawn into the penis, causing it to enlarge. A penile ring is then placed around the base of the penis to maintain the erection.

It may take up to two weeks for a man to be comfortable with using a vacuum pump.

Use of a penile ring is limited to 30 minutes. After that time the ring must be removed to prevent permanent damage to the penis. It is important not to go to sleep with the ring on.

4. SURGICAL OPTIONS – PENILE IMPLANTS

Penile implants are typically a consideration if less invasive options (tablets, injections, vacuum pumps) have not been successful. They are generally considered a 'last resort' management option.

A device can be surgically placed within the penis to create a mechanical erection.

During the operation, the normal spongy penile structure is removed to allow the device to be placed.

Diabetes is associated with a higher risk of operative infection which needs to be taken into account when considering a surgical option.

You would need to speak with your surgeon about the total cost of this surgery.

Most of the cost of a penile implant is covered by private health insurance with ancillary benefits packages. Costs to the patient, once health fund rebates have been applied, vary.

Lifestyle

Lifestyle changes can be a valuable addition to any ED treatment the doctor prescribes.

The benefits extend well beyond better sex. Remember to speak with your doctor before making any lifestyle changes.

Some changes you may want to consider are:

- Aim for a **healthy weight** – overweight and obesity can directly affect erectile function and some of the associated factors such as low testosterone levels, depression and sleep apnoea.
- Regular **exercise** – there are many well documented benefits. It may even boost testosterone levels which in turn may help achieve more regular erections.
- A balanced **diet** - may help to lower cholesterol levels and in turn reduce the chance of cholesterol blocking your arteries, which reduces the blood flow needed to achieve an erection.
- Responsible **drinking** - heavy drinking reduces the ability to have an erection. Long-term, excessive drinking causes serious problems - nerve damage, liver damage and hormone imbalances; several good reasons to take it easy on the alcohol.
- Reduce **stress and fatigue** – being physically and emotionally worn out can make it difficult to ‘get in the mood’. Talk with your partner. For conditions, such as anxiety and depression, you should see a doctor who may refer you to a psychologist or counsellor to help.
- Quit **smoking** - another reason to stop smoking - studies indicate that men who smoke cigarettes have a greater chance of developing ED than men who don't. Tobacco has a harmful affect on circulation and good circulation is needed for good erections.

Relationships

Erectile dysfunction can add pressure to a relationship.

It is understandable that a man experiencing ED may have many negative feelings that can contribute to depression, anxiety or simply withdrawing. However, ED can also be distressing for partners.

A ‘good’ relationship means different things to different people, but most people want respect and open communication.

Finding a solution is difficult if you don't know a relationship problem exists.

Not everyone wants a sexual relationship. Rather than trying to guess or assume what your partner wants, have an open and honest discussion.

This may seem unnecessary in long-term relationships as people tend to assume they know all there is to know about their partner - this is not always the case.

If you would like help, talk to your GP or specialist.

Other people you can talk to about your relationship include psychologists, sex therapists and relationship counsellors, who can provide an objective viewpoint.

Your partner can be a valuable support if you're feeling a little nervous about doing all the talking, so take your partner along.

For further information on relationship counselling, visit Relationships Australia at

www.relationships.com.au

and

www.relationshiphelponline.com.au

Impotence Australia at

www.impotenceaustralia.com.au

Where to now?

This resource has been produced to help you understand more about ED and how it relates to diabetes. If there is anything in this brochure that you are not sure about, take it with you the next time you see your doctor.

No one wants another medical condition to manage but the good news about ED is the range of effective treatment options.

As with any medical condition, early diagnosis and treatment provides the best chance of a good outcome.

Communication is key - both with your doctors and your partner.

Doctors are the experts in both diabetes and ED. The first step is to **start the ED conversation with your doctor** if she or he hasn't already started it with you.

Doctors have assisted hundreds of men facing similar challenges to you, so don't be afraid to ask them questions.

They should give you a comprehensive medical assessment and know your complete medical history before recommending any treatment.

Although you are never too old to be treated for ED, in some cases other factors may affect treatment outcome. Remember, your doctor is looking after your entire health, not only the ED.

If you do not feel that your doctor has satisfactorily addressed your ED queries, consider seeing another GP.

Involve your partner in discussions about ED. Your partner is an important support for you and should be included and informed. It should also make things easier for both of you in the future as there won't be any surprises if you understand what's in store.

The effect of a positive outlook should never be underestimated and there are several reasons for this including the very good success rates in treating ED in men with diabetes.

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