

## **ED** and Cardiovascular Disease

ED can be the presenting symptom for heart problems in many men

Men with ED are 50% more likely to suffer a heart attack during their lives

- ooccurrence of heart symptoms in 2-3 years
- ocardiovascular events in 3-5 years

## **ED** and **Smoking**

Quitting smoking now can improve erections by 30% in one year

Smoking is a leading cause of cardiovascular disease



#### **ED** and Diabetes

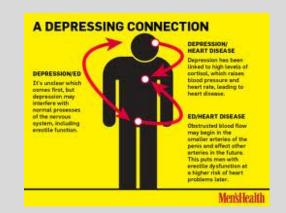
- The world diabetic population is expected to reach 366 million by 2030
- ED among diabetic men varies from 25-95%
- More than 50% of men with diabetes have sexual troubles and typically occurs within 10 years of their diabetes diagnosis
- Diabetes may cause irreversible damage to the nerves, blood vessels and smooth muscle function

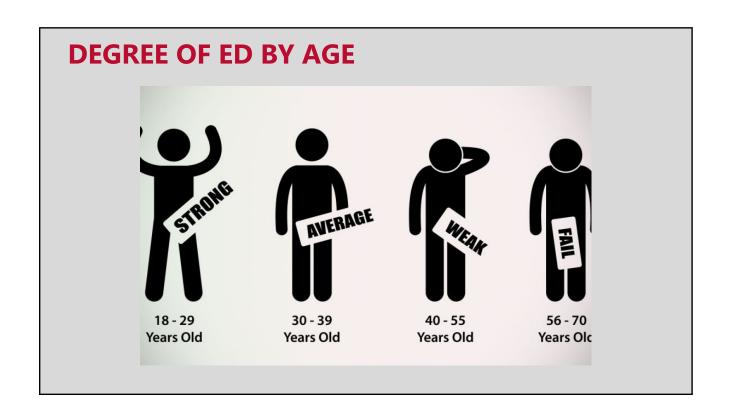
### **ED AND DEPRESSION**

40-60% of men with depression complain of sexual problems

- Medications
- Cortisol levels
- Loss of libido

Treatment of depression can improve erections





## YOU DO NOT HAVE TO LIVE WITH ERECTION PROBLEMS!

Nearly EVERY man can be successfully treated!



#### **ORAL MEDICATIONS**

Initial option for erectile dysfunction symptoms

VIAGRA (Sildenafil)": introduced in 1998

Phosphodiesterase Inhibitors: Promotes arterial vasodilation (increase blood flow) to penis

- Must take at least ½ hour to 1 hour before anticipated sexual activity
- Must take 2 hours after eating
- Can remain effective for up to 4 hours; Tadalafil can be effective up to 36 hours



#### **ORAL MEDICATIONS**

Cialis (tadalafil)

- Introduced in 2003
- For ED: 10-20 mg as needed or 5 mg daily (2008)
- For BPH&ED: 5 mg daily (2011)

Levitra (vardenafil)

Stendra (avanafil)

Which medication works better?

- No head to head trials
- Patient specific outcomes



#### **ORAL MEDICATION: SIDE EFFECTS**

- Headache
- Facial flushing
- Runny nose
- Upset stomach
- Body aches
- Risk of erection lasting 4 hours or more (priapism)



DO NOT take ED medications with NITRATES!

## **VACUUM ERECTION DEVICE (VED)**

### Advantages

- On demand use
- Non-invasive
- Safe and effective
- Drug free
- Penile rehab??

### Disadvantages

- Cumbersome
- Unnatural erection
- Penile pain/discomfort
- Delayed ejaculation



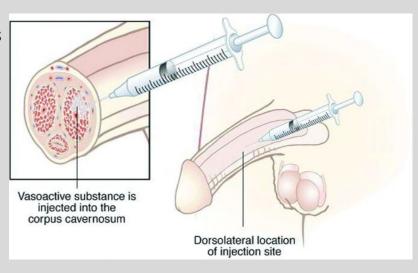
# INTRACAVERNOSAL INJECTION THERAPY (ICI)

Introduced in early 1980's

- Papaverine
- Phentolamine
- Alprostadil

#### Marketed

- EDEX
- TriMix



#### **PENILE INJECTION THERAPY**

#### Advantages

- Effective
- Onset of erection within 5-20

#### Disadvantages

- Priapism
- Possible bleeding at injection site
- Requires training
- Bruising
- Can cause penile curvature
- Poor long-term tolerability
- Fear of sticking needle into penis



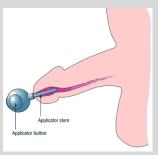
#### INTRAURETHRAL SUPPOSITORY

#### Advantages

- No needles or injection
- Erection within 10 to 15 minutes

#### Disadvantages

- Penile pain/burning
- Inadequate penile rigidity
- Must be refrigerated
- Cost
- Decreased dexterity/vision may find difficult administration

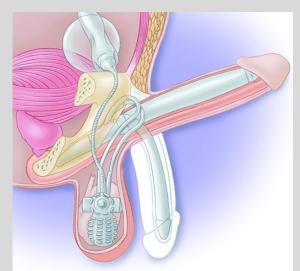




## SURGICAL OPTIONS: PENILE IMPLANTS

Ideal for men who have tried other treatments without success/regained quality of life

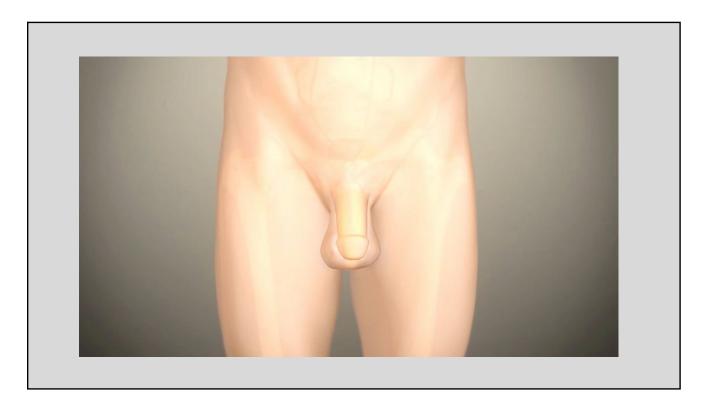
- On demand w/o need for medication
- Implants have been on the market for over 30 years (over 15,000 implants performed YEARLY)
- Extremely high patient and partner satisfaction



## 3-PIECE INFLATABLE PENILE IMPLANT

- Totally concealed in body
- Similar to natural erection
- Provides rigidity but deflates for concealment
- Erection longevity is controllable
- Highly recommended



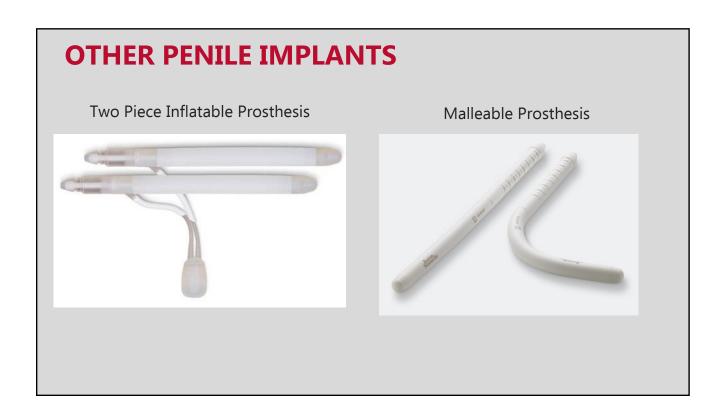


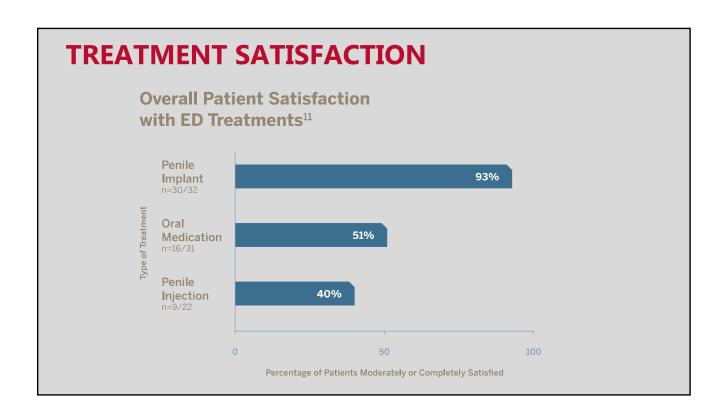
#### **BENEFITS**

- Long term solution
  - At 10 years, 80-90% of implants are still functioning
- Provides the ability to have an erection anytime you choose
  - Have sex when the mood strikes
- Enables you to maintain an erection as long as you desire
- Eliminates the need for costly medications
- Does not interfere with ejaculation or orgasm

#### **POSSIBLE RISKS**

- Infection
- Mechanical failure
- Penis will be shorter
- Head of penis is not as hard
- Erosion
- Lose the ability to have natural erection





## **Summary**

- ED is a very common problem
- Nearly every man can be successfully treated for ED
- Talk to your partner
- Talk to your urologist
  - Not every physician specializes in ED and/or has a specialized interest in sexual function