AMORE E PSICHE
AI TEMPI DEL DIABETE

Roma - 24 Marzo 2017
NH Hotel Villa Carpegna
"SALA TIEPOLO"

La Disfunzione erettile: quale approccio

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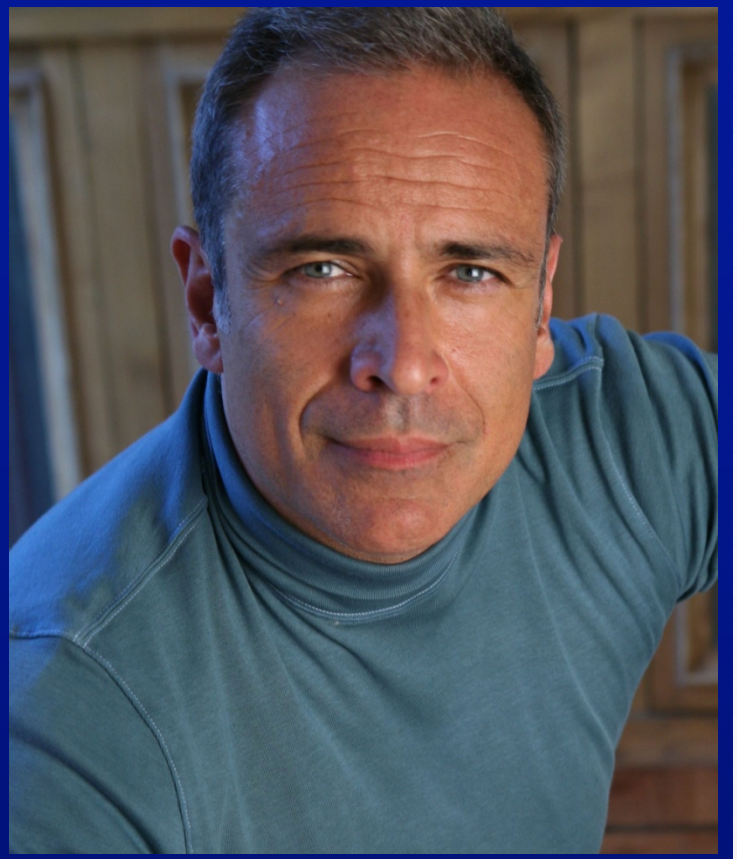

Maria Luisa Busi 53 *Enzo Decaro 59* *Kelly LeBrock 57*

Buon Compleanno per oggi 24 marzo

“Il sesso è uno dei nove motivi per reincarnarsi... gli altri otto sono ininfluenti.”

Henry Miller


QUI GIACE
FELICE UCCELLO
22. 11. 1950
09. 05. 2011
HAI LASCIATO DENTRO
DI ME UN VUOTO
INCOLMABILE
TUA MOGLIE

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E ora tantissima sofferenza…

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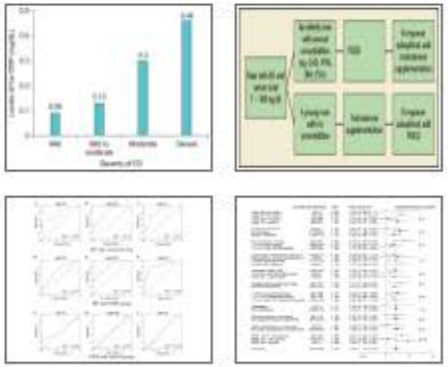

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Titles with your search terms

The Conception and Evaluation of Sexual Health Literature

Kenneth J. DeLay, MD, Igor Voznesensky, BS, and Wayne J. G. Hellstrom, MD

Table 1. Possible investigator or subject bias

Bias type	Definition	Method of mitigation
Selection	From sample being chosen non-randomly.	Appropriate study design.
Recall	Lack of appropriate recollection of past events. Most problematic in retrospective studies. Example: Women who have breast cancer might be more likely to recall risk factors than controls.[55]	Difficult to offset in retrospective studies.
Detection	Systematic differences between groups in how outcomes are determined. Example: Men seeing a urologist for BPH might be more likely to be diagnosed with prostate cancer than the average man.	In clinical trials this can be offset by blinding assessors of outcome.
Lead time bias	Most commonly a problem in screening studies in which a diagnosis is made sooner than by standard means but does not affect the natural history of the disease. Example: Patients screened for pancreatic cancer might "live" with their diagnosis longer, although their overall survival is not affected.	Measuring survival from the point of randomization, not the point of diagnosis in clinical trials.
Funding bias	Tendency of a study to find in favor a sponsor's interest.	Independent evaluators of data. There also is a need to avoid publication bias when a negative result is not published. There also have been concerns that unfavorable articles have been submitted to low-impact journals.
Observer bias	Researchers' bias causes them to subconsciously influence data collection.	This can be offset by appropriate blinding.
Contamination	Controls are generally assigned to placebo or no intervention. In some cases controls have received the intervention outside the trial without the investigators' knowledge. Example: There was criticism of the PLCO trial in which PSA screening was the intervention because a large number of men in the control group had been screened outside the trial.[56,57]	Appropriate screening and exclusion of those contaminated.

BPH = benign prostatic hyperplasia; PLCO = Prostate, Lung, Colorectal, and Ovarian Cancer Screening; PSA = prostate-specific antigen.

Sexual Dysfunction in Diabetic Men

Robert C. Kolodny, M.D., Charles B. Kahn, M.D., H. Howard Goldstein, M.D., and Donald M. Barnett, M.D., Boston

DIABETES, VOL. 23, NO. 4 Accepted for publication October 29, 1973.

The frequent occurrence of impotence with diabetes mellitus described in this study (eighty-five of 175 men or 48.6 per cent) is in agreement with previously reports.[2,3,5,6] Despite the frequency of this disorder, the pathophysiologic mechanism resulting in loss of erective function in diabetes is unclear.

Since there is no known effective therapy for such sexual dysfunction, it is most important that the physician be certain that he is not dealing with impotence due to correctible causes.

Ricordi da un passato in cui le soluzioni erano molto ridotte rispetto ad oggi

Disfunzione erettile (DE)

- **DSM-IV: "persistente o ricorrente incapacità di ottenere o mantenere una erezione peniena adeguata per il completamento della attività sessuale"**

DSM-IV, American Psychiatric Association, 1994

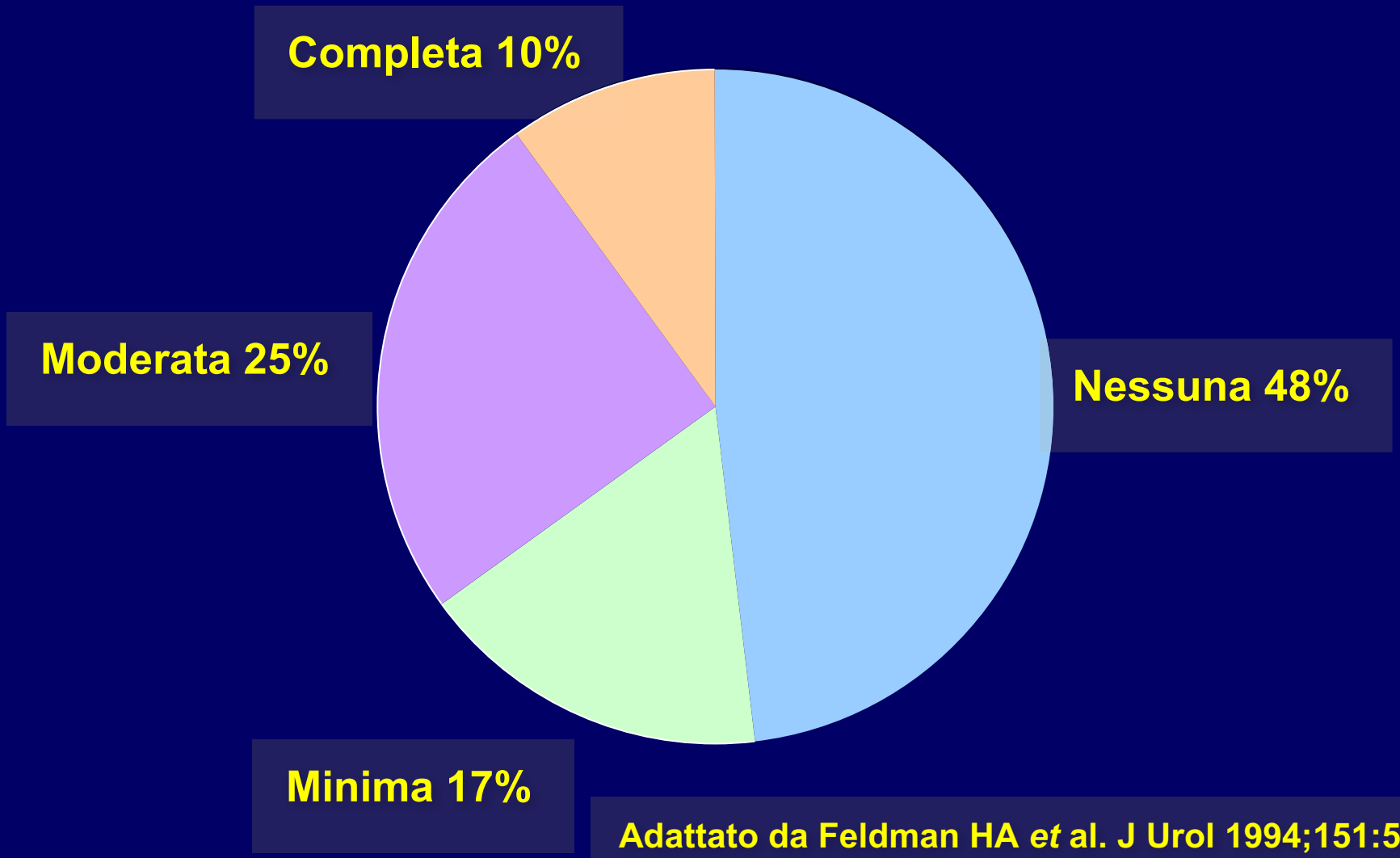
- **NIH Consensus Development Panel on Impotence: "incapacità di ottenere e/o mantenere un' erezione sufficiente a consentire un rapporto sessuale soddisfacente"**

NIH Consensus Development Panel on Impotence, JAMA, 270:83, 1993

Prevalenza della disfunzione erettile

(*Massachusetts Male Aging Study)*

1290 uomini di 40-70 anni area Boston 1988-9



Adattato da Feldman HA *et* al. J Urol 1994;151:54–61

REVIEW ARTICLE

Andrologia **38** (2006) 115–121

Epidemiology of sexual dysfunction in the male population

M. E. Beutel[1], W. Weidner[2] & E. Brähler[3]

Table 1 Prevalence of erectile dysfunction according to age group

30–39 years: 2.3%[a]
40–49 years: 0%[b] to 9.5%[a]
50–59 years: 2%[b] to 15.7%[a] and 30.8%[c]
60–69 years: 11%[b] to 23%[d], 34.4[a] and 55.1%[c]
>70 years: 15% (70–75 years[e]) to 40%[b]
70–79 years: 47%[d] to 53.4%[a]
80 years and above: 64%[d] to 76% (70–80 years[c])

[a]Braun *et al.* (2000).

[b]Holden *et al.* (2005).

[c]Rosen *et al.* (2003).

[d]Bacon *et al.* (2003).

[e]Feldman *et al.* (1994).

Prevalenza della disfunzione erettile in 2010 soggetti in Italia

Età (anni)	18–29	30–39	40–49	50–59	60–70	>70
Soggetti (%)	2,1	1,9	4,8	15,7	26.8	48.3

PREVALENZA TOTALE: 12.8 %

Identificazione svolta da 143 medici generici nel periodo gennaio 1996 – febbraio 1997

Parazzini et al. Eur Urol 2000, 37: 43-49

International Journal of Impotence Research (2002) 14, 256–258
 0955-9930/02 $25.00
www.nature.com/ijir

Did men with erectile dysfunction discuss their condition with partner and physicians? A survey of men attending a free call information service

V Mirone[1], V Gentile[2], G Zizzo[3], M Terry[3], N Longo[1], F Fusco[1] and F Parazzini[4]*

Erectile dysfunction duration

	<6 m	6m-1y	1-3y	>3y
Discussion with partner				
No %	52.1	39.6	37.6	40.2
Yes %	47.9	60.4	62.4	59.9
Discussion with physician				
No %	66.4	51.7	42.6	42.1
Yes %	33.6	48.3	57.4	57.9

Sexual dysfunction and diabetes

G. JACKSON

Int J Clin Pract, April 2004, **58**, 4, 358–362

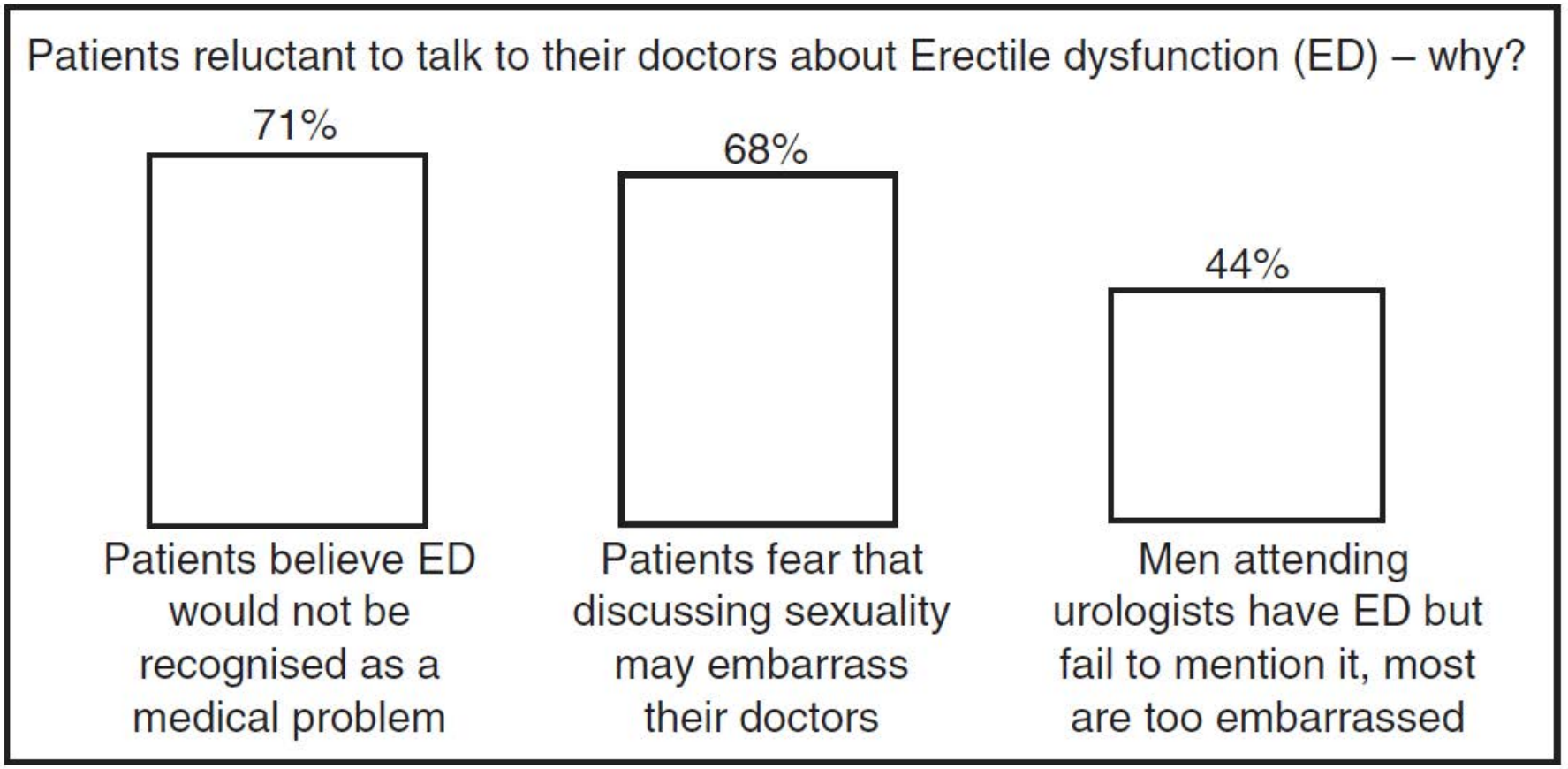


Figure 2 Men fail to volunteer their erectile dysfunction even in the enlightened 'post-Viagra' era (3)

Comuni fattori di rischio per la disfunzione erettile

- Fattori psicologici
- Età
- Attività fisica
- Farmaci
- Consumo di tabacco
- Consumo di alcol
- Consumo di droghe
- Dislipidemie
- Traumi
- Chirurgia pelvica
- Malattie cardiovascolari
- Diabete mellito
- Epatopatie
- Nefropatie
- Disordini neurologici
- Disordini ormonali

DE - Fattori di rischio

Principali Patologie

- Malattie metaboliche (diabete, dislipidemie, ecc.)
- Malattie endocrine (ipogonadismo, iperPRL, ecc.)
- Malattie cardiovascolari (ipertensione, ecc.)
- Malattie renali (insufficienza renale, ecc.)
- Malattie epatiche (cirrosi epatica, ecc.)
- Malattie iatrogene (farmaci, traumi, chirurgia, ecc.)
- Malattie dell'apparato respiratorio (BPCO, ecc.)
- Malattie neuropsichiatriche (depressione, SM, ecc.)
- Malattie d'organo (vasculopatie, IPP, fibrosi, ecc.)

SEXUAL MEDICINE REVIEWS

Diabetes and Sexuality

Fuat Kizilay, MD,[1] Helena Elizabeth Gali, BA,[2] and Ege Can Serefoglu, MD, FECSM[3]

ABSTRACT

Introduction: Deterioration in sexual functioning is one of the major and serious complications of diabetes. This common metabolic disorder not only affects sexuality through microvascular and nerve damage but also has psychological aspects. In men, the primary complications are erectile dysfunction, ejaculatory dysfunction, and loss of libido. Women similarly experience sexual problems, including decreased libido and painful intercourse.

Aim: To summarize the effects of diabetes on sexuality, evaluate the impact of diabetes on sexual function, and assess the conventional and novel treatment approaches based on recent studies.

Methods: A literature review of peer-reviewed journal articles and guidelines was performed.

Main Outcome Measures: To assess the effects of diabetes on sexuality and to focus on treatment approaches.

Results: Male and female sexual dysfunctions are a significant complication of diabetes. Tight glycemic control seems to be beneficial in delaying the onset of sexual problems and ameliorating them when they are present. Erectile dysfunction occurs as one of the first problems. The current mainstay of treatment for erectile dysfunction is therapy with phosphodiesterase type 5 inhibitors and then a stepwise approach of management. Men also can experience ejaculation problems and loss of libido. Diabetes also can decrease testosterone levels, which further decreases libido. Hypogonadal men with diabetes might benefit from testosterone replacement therapy. Diabetic women also can have sexual problems. These problems mainly include loss of libido, decrease in arousal and lubrication resulting in painful intercourse, and loss of orgasm. All these challenges require a multidisciplinary approach.

Conclusion: Diabetes has detrimental effects on the sexual function of patients. Diabetologists who primarily care for the patient should not only focus on the glycemic control of their patients but also address their sexual complaints, because these problems can significantly impair their quality of life. Urologists, gynecologists, endocrinologists, and psychiatrists should work in a multidisciplinary manner for the treatment of decreased sexual functioning as a result of diabetes.

Sex Med Rev 2017;5:45–51.

DISFUNZIONE ERETTILE

"Marker" di patologie sistemiche?

CARDIOPATIA ISCHEMICA

IPERTENSIONE

DIABETE MELLITO

DISLIPIDEMIA

SINDROME METABOLICA

Reminder of important clinical lesson

BMJ Case Reports 2012; doi:10.1136/bcr.12.2011.5289

Erectile dysfunction as an initial presentation of diabetes discovered by taking sexual history

Nobutaka Hirooka,[1] Daniel P Lapp[2]

Learning points

- Family physicians need to maintain awareness of sexual dysfunction as part of the history taking during general medical checkup because reporting the symptom by patient may be hindered by various barriers.
- ED is associated with major comorbidities (eg, cardiovascular disease, hypertension, dyslipidaemia, psychological conditions and diabetes).
- Erectile dysfunction may not be considered a common presenting symptom for diabetes, but it does occur.

Diabete Mellito

- DE multifattoriale (vascolare, neurologica, endocrina, psicologica)
- i soggetti diabetici hanno una probabilità tre volte maggiore di sviluppare la DE rispetto agli uomini non diabetici
- i diabetici sono inoltre affetti da DE in età più giovane rispetto ai non diabetici
- negli uomini in cui il diabete non sia ancora stato diagnosticato, la DE può essere il sintomo di esordio della malattia
- fattori di rischio ulteriori sono fumo, alcool, scarso controllo glicemico, durata della malattia, ecc.

DE - Fattori di rischio

Diabete Mellito

- **Tipo 1 e tipo 2 $\Rightarrow$ prevalenza DE $\pm$ 50%**

  (range 20 – 75%)

- **aggiustata per età, durata e severità della malattia**

Melman A & Gingell JC, J Urol, 161(1):5-11, 1999

- **MMAS $\Rightarrow$ prevalenza di DE completa 28%**

Feldman HA et al, J Urol, 151:54-61, 1994

Prevalenza della disfunzione erettile nei soggetti diabetici in Italia

	Età (anni)				Prevalenza totale
	<45	46–55	56–65	>66	
Tipo 1 (%)	13	43	54	66	51
Tipo 2 (%)	16	29	42	49	37

1383 diabetici tipo 1 e 8373 diabetici tipo 2

Fedele et al. Int J Epidemiol 29: 524-31, 2000

Prevalence and associations of erectile dysfunction in a sample of Italian males with type 2 diabetes

DIABETES RESEARCH AND CLINICAL PRACTICE 108 (2015) 329–335

Giuseppe Derosa [a,b,*], *Davide Romano* [a], *Carmine Tinelli* [c], *Angela D'Angelo* [a], *Pamela Maffioli* [a,d]

ABSTRACT

Aim: The aim of this study was to evaluate the prevalence of erectile dysfunction (ED) in a sample of type 2 diabetic patients. As secondary endpoint, we evaluated the levels of some adipocytokines in patients with and without ED.

Material and methods: We enrolled 220 males affected by type 2 diabetes mellitus. We administered the IIEF (International Index of Erectile Function), SAS (self-rating anxiety scale) and SDS (self-rating depression scale) questionnaires. We evaluated body mass index, glycemic control, fasting plasma insulin (FPI), homeostasis model assessment of insulin resistance index (HOMA-IR), lipid profile, sexual hormones, adiponectin (ADN), resistin, retinol binding protein-4 (RBP-4), visfatin, vaspin.

Results: 52.9% of patients were affected by ED. Patients with a HbA_{1c} <7% (53 mmol/mol) in all measurements in the two previous years had a lower incidence of ED, while the prevalence of ED increased with the increasing of times HbA_{1c} was >7% (53 mmol/mol). Patients with ED had higher levels of triglycerides, and higher levels of FPI, 9.9 μU/ml vs 8.2 μU/ml ($p < 0.05$). Resistin levels were higher in patients with ED compared to those without ED ($p < 0.05$) and free testosterone was lower in patients affected by ED.

Conclusions: Almost half of type 2 diabetic patients attending our clinic were affected by ED and glycemic control seems to play a role in ED pathogenesis.

ORIGINAL ARTICLE International Journal of Impotence Research (2017) 29, 17–22

Erectile dysfunction in young men with type 1 diabetes

MI Maiorino[1], G Bellastella[1], E Della Volpe[1], O Casciano[1], L Scappaticcio[1], P Cirillo[1], D Giugliano[1] and K Esposito[2]

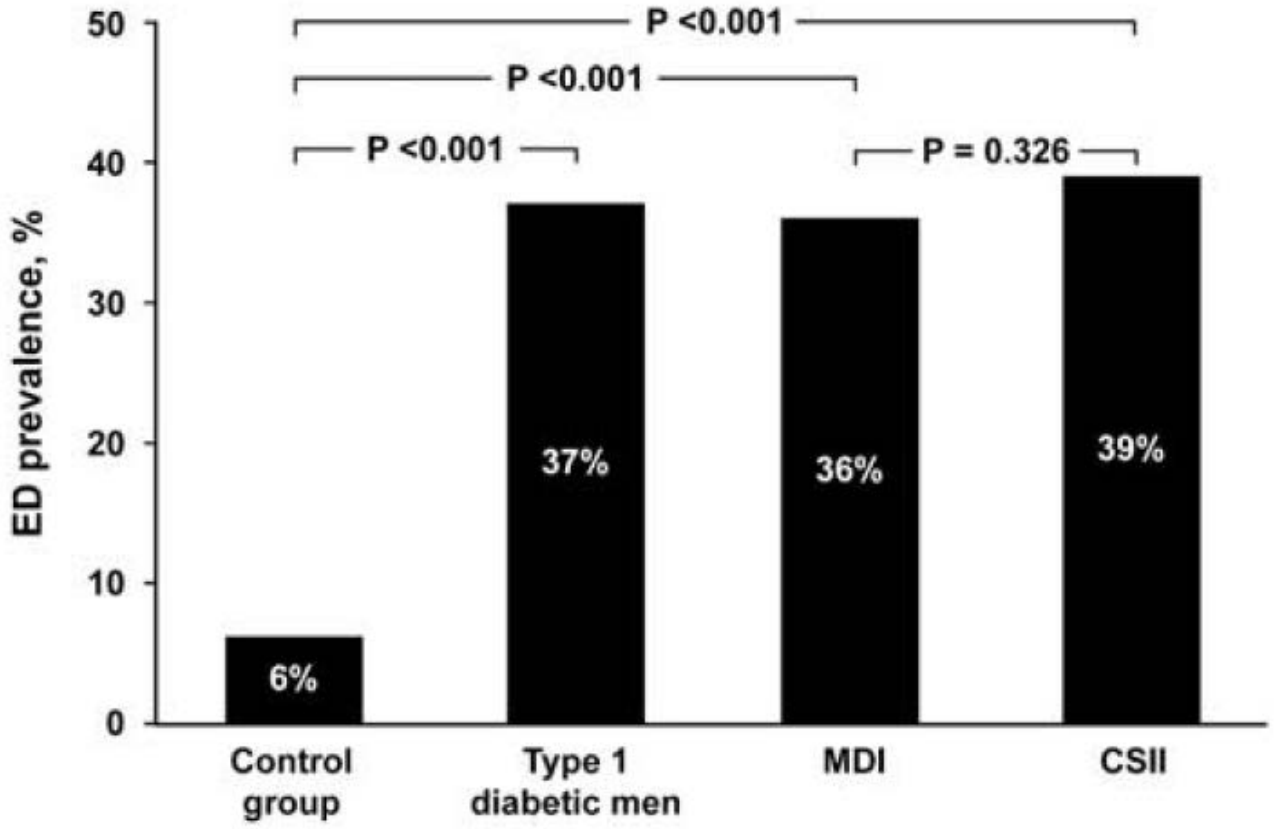


Figure 2. Prevalence of ED of type 1 diabetic patients and control group. CSII, continuous, subcutaneous insulin infusion; MDI, multiple daily injections.

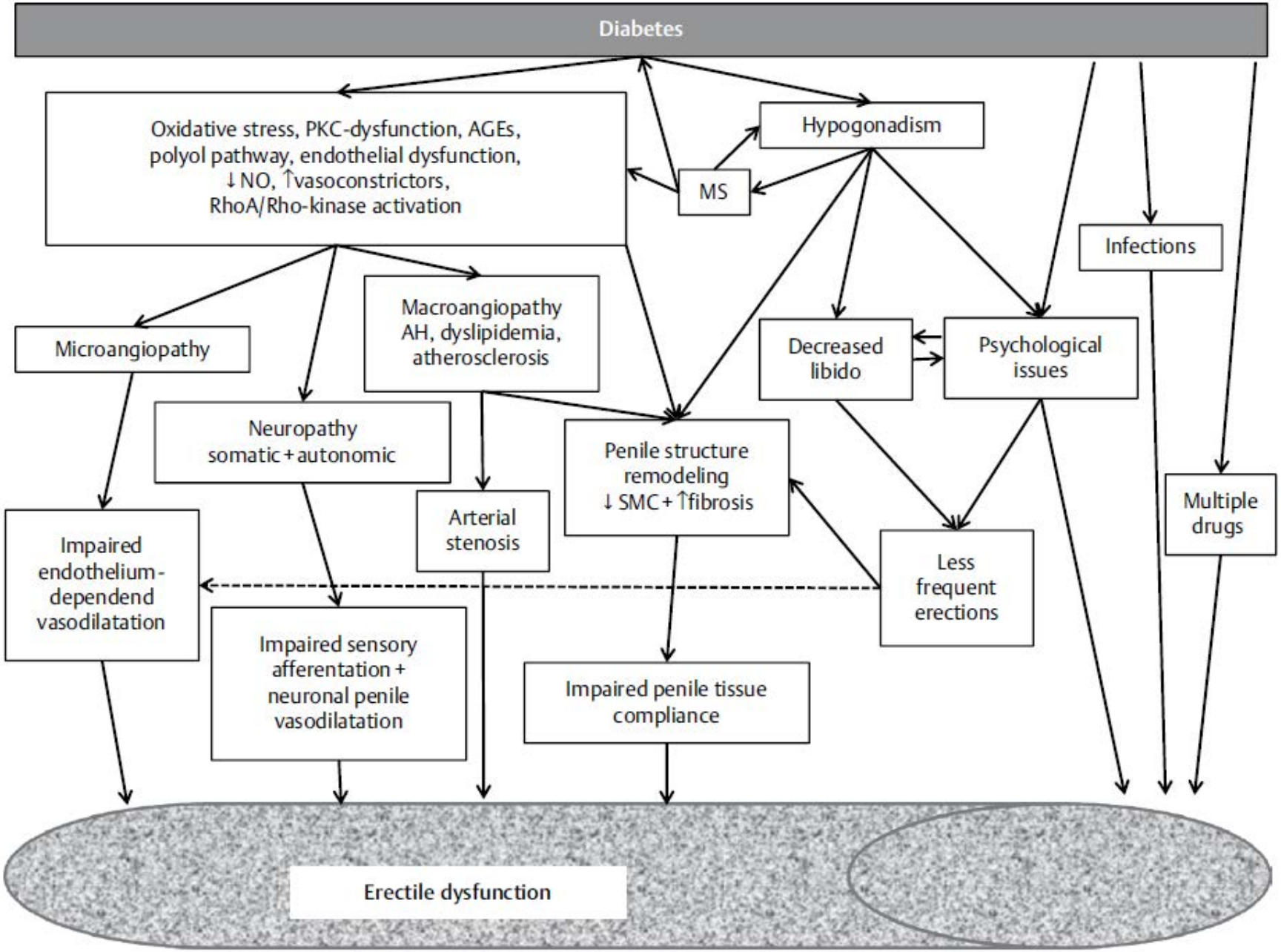
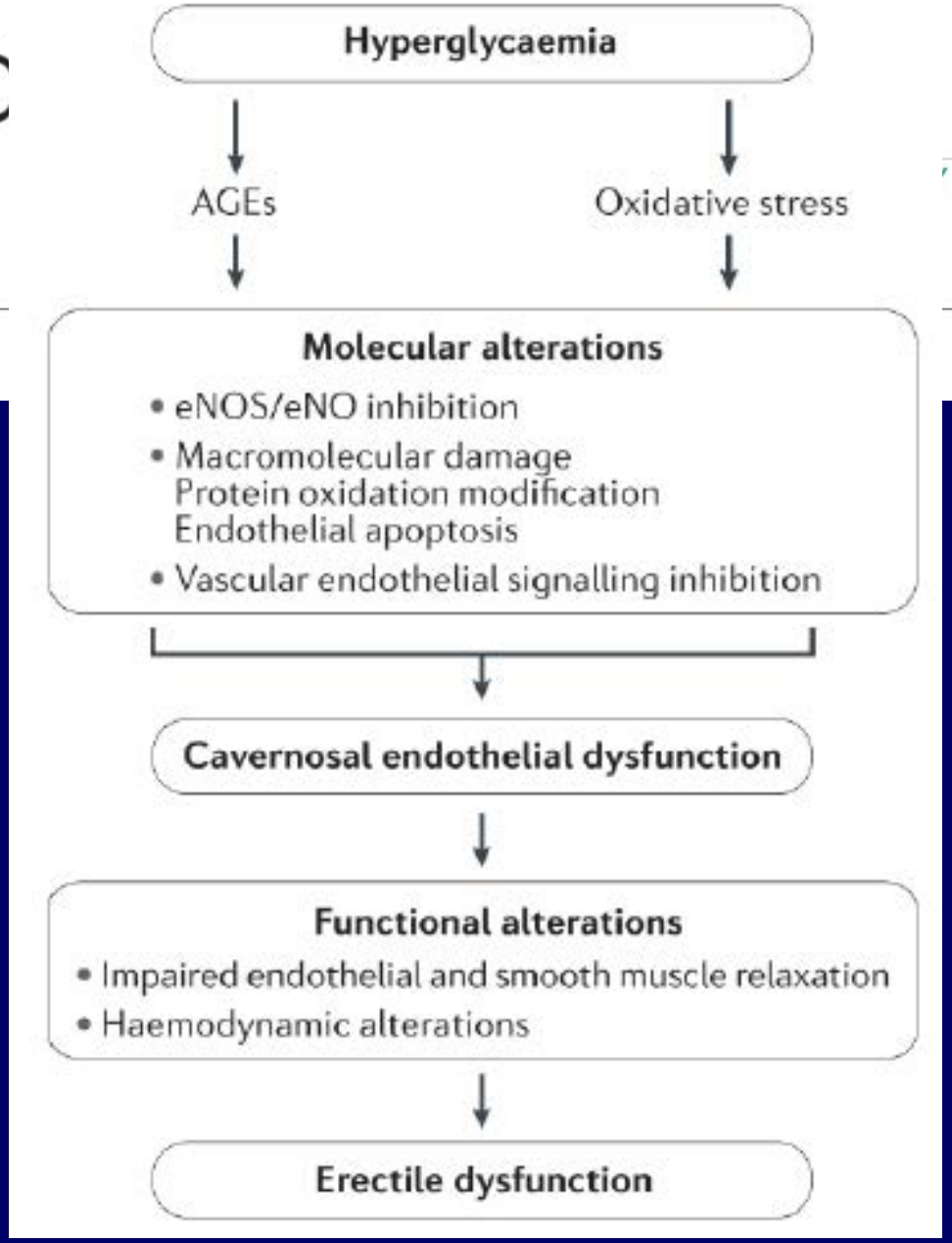


Fig. 3 Pathogenesis of DED. AGEs – advanced glucation end products; PKC – protein kinase C; NO – nitric oxide; MS – metabolic syndrome; SMS – smooth muscle cells; AH – arterial hypertension.

Molecular mechanisms associated with diabetic enc dysfunction

Ângela Castela and Carla Costa

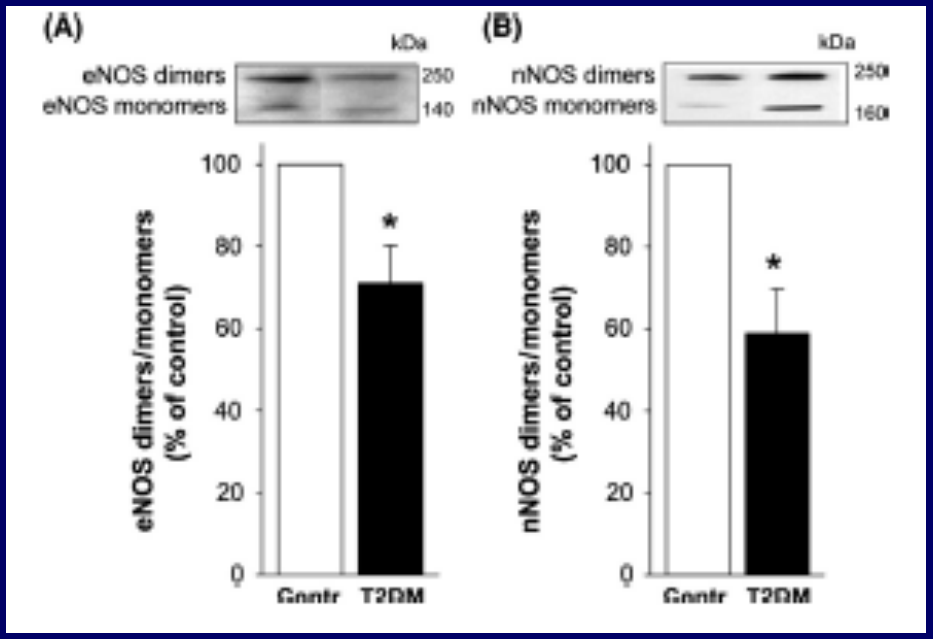
- ED is a prevalent complication of diabetes, affecting up to 75% of all diabetic men, and is responsible for a decreased quality of life for these patients
- Diabetic ED has a multifactorial aetiology, although cavernosal endothelial dysfunction is currently recognized as a hallmark of the disease pathophysiology
- Diabetes-induced hyperglycaemia and oxidative stress increase are responsible for the loss of endothelial cell functionality and integrity
- Diabetic systemic and cavernosal endothelial dysfunction is maintained owing to the detrimental effects of diabetes on the vascular repair mechanisms of angiogenesis and vasculogenesis
- Improvements in endothelial health and amelioration of ED might be achieved by tight glycaemic control and treatment with PDE5Is and testosterone supplementation
- Understanding the molecular pathways involved in endothelial dysfunction will aid in the identification of novel therapeutic strategies to improve endothelial and erectile function in diabetic men

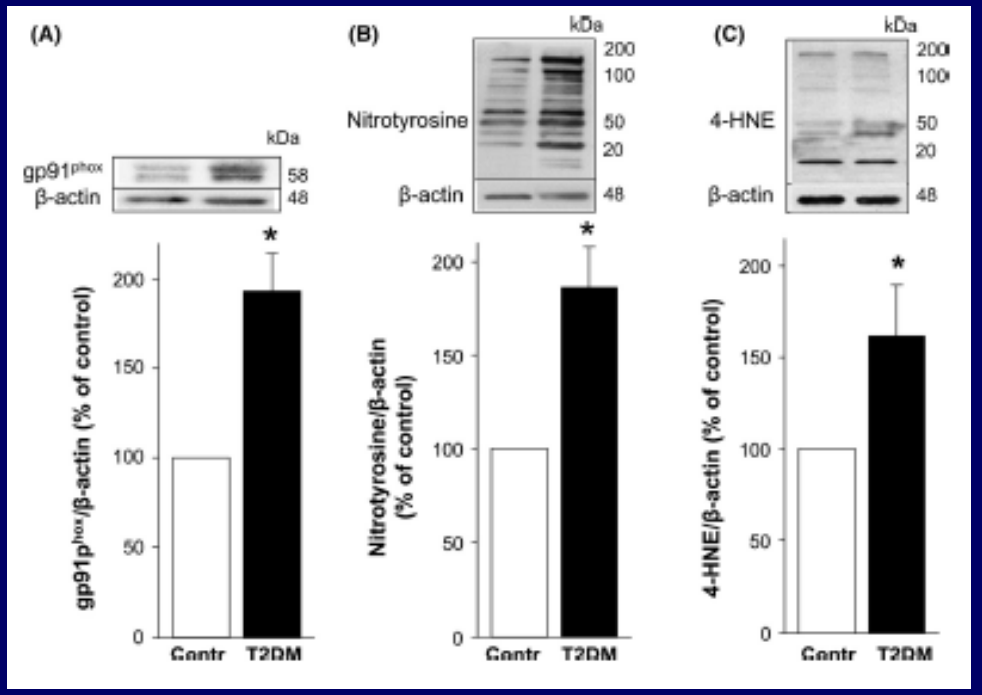


Constitutive NOS uncoupling and NADPH oxidase upregulation in the penis of type 2 diabetic men with erectile dysfunction

Andrology, 1–5

B. Musicki and A. L. Burnett





DE - Fattori di rischio

Farmaci

Principali categorie di farmaci associati alla DE:

- **Farmaci antiblastici**
- **Anticolinergici**
- **Antiipertensivi (diuretici, betabloccanti, ecc.)**
- **Anti H2 (cimetidina)**
- **Ormoni (antiandrogeni, LHRHa, ecc.)**
- **Psicofarmaci (antidepressivi, neurolettici, ecc.)**
- **Dopaminoantagonisti (metoclopramide, ecc.)**
- **Altri (digitale, antidislipidemici, ecc.)**

DE - Fattori di rischio

Stile di vita

- **Consumo di alcool**

- Un consumo >600ml a settimana è associato con una aumentata probabilità di DE minima da 17 a 29%

Feldman HA et al, J Urol, 151:54, 1994

Modifica dello stile di vita

- Abolizione del fumo
- Diminuzione del peso corporeo
- Diminuzione od eliminazione dell' alcool
- Mantenimento di un corretto controllo della pressione arteriosa
- Svolgimento di una regolare attività fisica
- Astensione dall' uso di stupefacenti
- ecc. ecc. ecc.....

Modifying Risk Factors to Prevent and Treat Erectile Dysfunction

Sidney Glina, MD,* Ira D. Sharlip, MD,† and Wayne J.G. Hellstrom

J Sex Med 2013;10:115

Introduction. Erectile dysfunction (ED) is a common complaint in men over 40 years of age and prevalence rates increase with age. Comorbidities such as heart disease, diabetes, dyslipidemia, hypertension, and depression have been described as primary risk factors for the development of ED. Additionally, a number of modifiable lifestyle factors, including physical activity, smoking, alcohol consumption, diabetes control, and obesity, have been associated with ED.

Aim. The association of modifiable behavioral factors with ED, mainly among men without recognized comorbidities, opens the possibility for intervention strategies to prevent and potentially improve erectile function in patients suffering with ED.

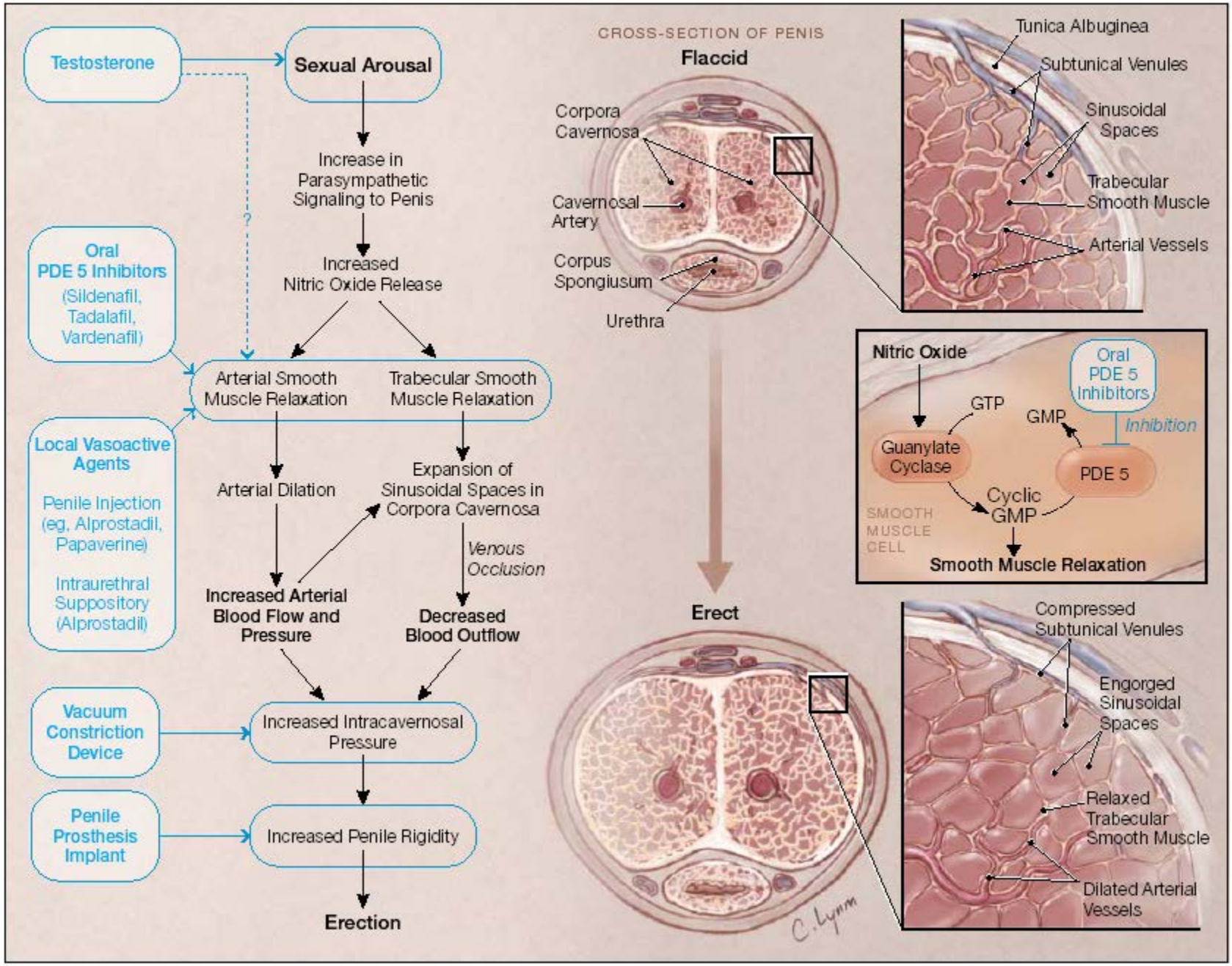
Conclusion. While intriguing, most of the literature and evidence is not completely scientifically compelling as to how modifying lifestyle risk factors can improve erectile function. Weight loss may reverse ED through other mechanisms, namely, decreased inflammation, increased serum testosterone levels, and improved mood and self-esteem. Currently, the evidence at hand recommends that patient education should be aimed at increasing exercise, reducing weight to achieve a body mass index less than 30 kg/m^2, and stopping smoking to improve or restore erectile function, mainly in men without established comorbidities. When comorbidities are present, lifestyle modifications may be important in preventing or reducing sexual dysfunction. These modifications may include precise glycemic control in diabetic men and the use of pharmacologic therapies for hypertension and depression, which are less likely to cause sexual side effects. **Glina S, Sharlip ID, and Hellstrom WJG. Modifying risk factors to prevent and treat erectile dysfunction. J Sex Med 2013;10:115–119.**

L’atto sessuale è un saluto che due anime si scambiano

BORGES

Come valutare un paziente con disfunzione erettile?

Figure. Mechanism of Erection and Sites of Action of Various Treatment Modalities for Erectile Dysfunction



Classificazione Disfunzione Erettile

- La DE può essere dovuta a
  - fattori vascolari
  - fattori neurologici
  - fattori ormonali
  - fattori psicologici
  - fattori metabolici
  - fattori tossici
  - fattori iatrogeni
  - fattori locali

Disfunzione Erettile e Diabete

La disfunzione erettile può rappresentare il primo segno evidente di diabete; per tale motivo si suggerisce di proporre al paziente che riferisce ridotta funzionalità erettile uno screening di primo livello per la valutazione dell'omeostasi glucidica

Viceversa, al paziente con già nota diagnosi di diabete è opportuno porre domande riguardo la vita sessuale, in quanto il paziente può non riferire tali problemi piuttosto frequenti nella patologia diabetica.

Clinical Practice Guidelines

Erectile Dysfunction

Can J Diabetes 37 (2013) S150–S152

RECOMMENDATIONS

1. All adult men with diabetes should be regularly screened for ED with a sexual function history [Grade D, Consensus].
2. Men with diabetes and ED should be investigated for hypogonadism [Grade D, Level 4 (16,31,32,34)].
3. A PDE5 inhibitor, if there are no contraindications to its use, should be offered as first-line therapy to men with diabetes and ED in either an on-demand [Grade A, Level 1A (47-53)] or scheduled-use [Grade B, Level 2 (53,54)] dosing regimen.
4. Referral to a specialist in ED should be considered for eugonadal men who do not respond to PDE5 inhibitors or for whom the use of PDE5 inhibitors is contraindicated [Grade D, Consensus].
5. Men with diabetes and ejaculatory dysfunction who are interested in fertility should be referred to a healthcare professional experienced in the treatment of ejaculatory dysfunction [Grade D, Consensus].

Abbreviations:
ED, erectile dysfunction; *PDE5*, phosphodiesterase type 5.

Coronary Heart Disease, Diabetes, and Sexuality in Men

J Sex Med 2016;13:887–904.

Geoff Hackett, MD, FRCPI, MRCGP,[1] Michael Krychman, MD,[2] David Baldwin, MBBS, DM, FRCPsych,[3] Nelson Bennett, MD, FACS,[4] Ahmed El-Zawahry, MD,[5] Alessandra Graziottin, MD,[6] Monika Lukasiewicz, MD,[7] Kevin McVary, MD,[5] Yoshikazu Sato, MD, PhD,[8] and Luca Incrocci, MD, PhD[9]

RECOMMENDATIONS

1. Detection of erectile dysfunction (ED) provides an opportunity to decrease the risk for cardiovascular disease (CVD; level of evidence = 1a, level of recommendation = A).
2. ED not only shares risk factors with CVD but also is an independent marker of increased risk for CVD (level of evidence = 1a, level of recommendation = A).
3. ED is a marker of significant increased risk of CVD, coronary artery disease (CAD), stroke, and all-cause mortality (level of evidence = 1a, level of recommendation = A).
4. The relative risk of coronary events associated with ED is greatest in younger men (30–60 years old) and these men should be targeted for aggressive decrease of risk (level of evidence = 1a, level of recommendation = A).
5. Incident ED has a similar or greater risk of predictive value for cardiac events as traditional risk factors such as family history, myocardial infarction (MI), smoking, and hyperlipidemia (level of evidence = 1a, level of recommendation = A).
6. ED often occurs in the presence of silent CAD with a time window from ED onset to a CAD event of 2 to 5 years (level of evidence = 1a, level of recommendation = A).
7. ED is predictive of peripheral arterial disease and stroke (level of evidence = 1a, level of recommendation = A).
8. The more severe the ED, the greater the degree of risk of CAD, extent of CAD, and risk of peripheral arterial disease (level of evidence = 1a, level of recommendation = A).
9. Correction of low testosterone levels in men with type 2 diabetes mellitus (T2DM) improves sexual desire and erections (level of evidence = 1b, level of recommendation = A) and salvages men with previously failed phosphodiesterase type 5 inhibitor (PDE5I) treatment (level of evidence = 1b, level of recommendation = B).
10. Intensive lifestyle intervention improves sexual function in men with mild ED (grade = 1a, level of recommendation = B) but has minimal effect in men with high CV burden and T2DM (level of evidence = 2b, level of recommendation = B).

Erectile Dysfunction and Undiagnosed Diabetes, Hypertension, and Hypercholesterolemia

Ann Fam Med 2015;13:331-335. doi: 10.1370/afm.1816.

In conclusion, men with erectile dysfunction, particularly those who are middle-aged, should be made aware of their potential for having underlying diabetes and be encouraged to obtain screening. In the same vein, physicians should be vigilant in obtaining sexual histories in middle-aged men and screening those with erectile dysfunction for diabetes.

RESULTS After multivariate adjustment, men with erectile dysfunction had more than double the odds of having undiagnosed diabetes (odds ratio = 2.20; 95% CI, 1.10-4.37), whereas no association was seen for undiagnosed hypertension or undiagnosed hypercholesterolemia. For the average man aged 40 to 59 years, the predicted probability of having undiagnosed diabetes increased from 1 in 50 in the absence of erectile dysfunction to 1 in 10 in the presence of erectile dysfunction.

Diagramma di flusso per la valutazione iniziale

- Anamnesi
  - Medica
  - Sessuale
  - Psicosociale
- Esame clinico
- Questionari
- Esami diagnostici
- Educazione del paziente
- Trattamento - consulenza specialistica

THE INTERNATIONAL INDEX OF ERECTILE FUNCTION (IIEF): A MULTIDIMENSIONAL SCALE FOR ASSESSMENT OF ERECTILE DYSFUNCTION

RAYMOND C. ROSEN, ALAN RILEY, GORM WAGNER, IAN H. OSTERLOH, JOHN KIRKPATRICK, AND AVANISH MISHRA

UROLOGY **49**: 822–830, 1997.

Individual items of International Index of Erectile Function Questionnaire and response options (US version)

Question*	Response Options
Q1: How often were you able to get an erection during sexual activity?	0 = No sexual activity 1 = Almost never/never 2 = A few times (much less than half the time) 3 = Sometimes (about half the time) 4 = Most times (much more than half the time) 5 = Almost always/always
Q2: When you had erections with sexual stimulation, how often were your erections hard enough for penetration?	
Q3: When you attempted sexual intercourse, how often were you able to penetrate (enter) your partner?	0 = Did not attempt intercourse 1 = Almost never/never 2 = A few times (much less than half the time) 3 = Sometimes (about half the time) 4 = Most times (much more than half the time) 5 = Almost always/always
Q4: During sexual intercourse, how often were you able to maintain your erection after you had penetrated (entered) your partner?	
Q5: During sexual intercourse, how difficult was it to maintain your erection to completion of intercourse?	0 = Did not attempt intercourse 1 = Extremely difficult 2 = Very difficult 3 = Difficult 4 = Slightly difficult 5 = Not difficult

* *All questions are preceded by the phrase "Over the past 4 weeks."*

L'International Index of Erectile Function - 5 (IIEF-5) è stato creato allo scopo di fornire un questionario sensibile e specifico per valutare la funzione erettiva relativa agli ultimi sei mesi

---

1. ***Negli ultimi sei mesi come è stata la sua capacità di raggiungere e mantenere l'erezione?***

Nulla	Molto bassa	Bassa	Moderata	Alta	Molto alta
☐	☐	☐	☐	☐	☐
0	1	2	3	4	5

2. ***Negli ultimi sei mesi dopo la stimolazione sessuale quanto spesso hai raggiunto un'erezione sufficiente alla penetrazione?***

Nessuna attività	Quasi mai o mai	Poche volte	Qualche volta	Il più delle volte	Quasi sempre
☐	☐	☐	☐	☐	☐
0	1	2	3	4	5

3.***Negli ultimi sei mesi durante il rapporto sessuale quanto spesso è riuscito a mantenere l'erezione dopo la penetrazione?***

Nessun rapporto	Quasi mai /mai	Poche volte	Qualche volta	Il più delle volte	Quasi sempre
☐	☐	☐	☐	☐	☐
0	1	2	3	4	5

4. ***Negli ultimi sei mesi durante il rapporto sessuale quanto è stato difficile mantenere l'erezione fino alla fine del rapporto?***

Nessuna attività	Difficilissima	Molto difficile	Difficile	Abbastanza facile	Facile
☐	☐	☐	☐	☐	☐
0	1	2	3	4	5

5. ***Negli ultimi sei mesi quando ha avuto un rapporto sessuale quanto spesso ha provato piacere?***

Nessun rapporto	Quasi mai /mai	Poche volte	Qualche volta	Il più delle volte	Quasi sempre
☐	☐	☐	☐	☐	☐
0	1	2	3	4	5

Punteggio: da 22-25 attività normale; da 17 a 21 disfunzione erettile lieve;da 12 a 16 DE lieve-moderata; da 8 a 11 moderata; da 5 a 7 grave

Physical Examination and Laboratory Testing for Men with ED

Hussein M. Ghanem, MD,* Andrea Salonia, MD,† and Antonio Martin-Morales, J Sex Med 2013;10:108

Table 1 General and local examination for men with erectile dysfunction

General examination

- Blood pressure and heart rate and rhythm measurement
- Male secondary sex characters
- Gynecomastia and breast tenderness
- Peripheral pulses
- Rule out obvious abdominal masses (e.g., aortic aneurysm)
- Vibratory sensation
- Waist circumference
- Scars from previous surgery or trauma

Local examination

- Penis: size, lesions, scars, fibrosis, and position of meatus
- Scrotum: testicular size and consistency
- Digital rectal examination: prostate and seminal vesicles
- Perianal sensation and rectal sphincter tone (optional)
- Bulbocavernous reflex (optional)

Penile Dimensions of Diabetic and Nondiabetic Men With Erectile Dysfunction: A Case–Control Study

Nader Salama

American Journal of Men's Health
1–10

Table 4. The Penile Dimensions in the Current and Veale et al. (2015) Studies.

	The current study (n = 105, each group)		
Penile dimension	Controls (M ± SD, cm)	Diabetic patients (M ± SD, cm)	Nondiabetic patients (M ± SD, cm)
Total flaccid length	12.88 ± 1.46	11.8 ± 1.94	12.77 ± 1.53
Flaccid circumference	9.14 ± 0.89	8.84 ± 0.82	9.11 ± 0.79
Total erect length	15.04 ± 1.51	13.96 ± 2	14.88 ± 1.48
Erect circumference	11.92 ± 1.06	11.56 ± 1.17	12.06 ± 1.02

In conclusion, diabetic and nondiabetic patients with ED presented, in varying degrees, significant decline in their penile dimensions, and this was more prevalent in diabetic patients.

Assessment of erectile dysfunction in diabetic patients

Farqad B. Hamdan* and Hisham Y. Al-Matubsi†

International Journal of Andrology **32,** 176–185

Table 3 Illustrate the BCR and dorsal sensory nerve of penis components of the control subjects and diabetic patients

Component	Control group (mean ± SD) $n = 30$	DM patients (mean ± SD) $n = 38$	p–Value
BCR			
Latency (msec)	28.58 ± 2.66	44.15 ± 10.68	<0.0001
Amplitude (μv)	13.75 ± 6.86	6.73 ± 4.83	<0.0001
Dorsal nerve of penis			
SCV (m/sec)	45.23 ± 2.67	34.61 ± 3.07	<0.0001
Amplitude (μv)	14.28 ± 4.75	6.21 ± 2.96	<0.0001

BCR, bulbocavernosus reflex; SCV, sensory conduction velocity.

Disfunzione erettile
Esami di laboratorio

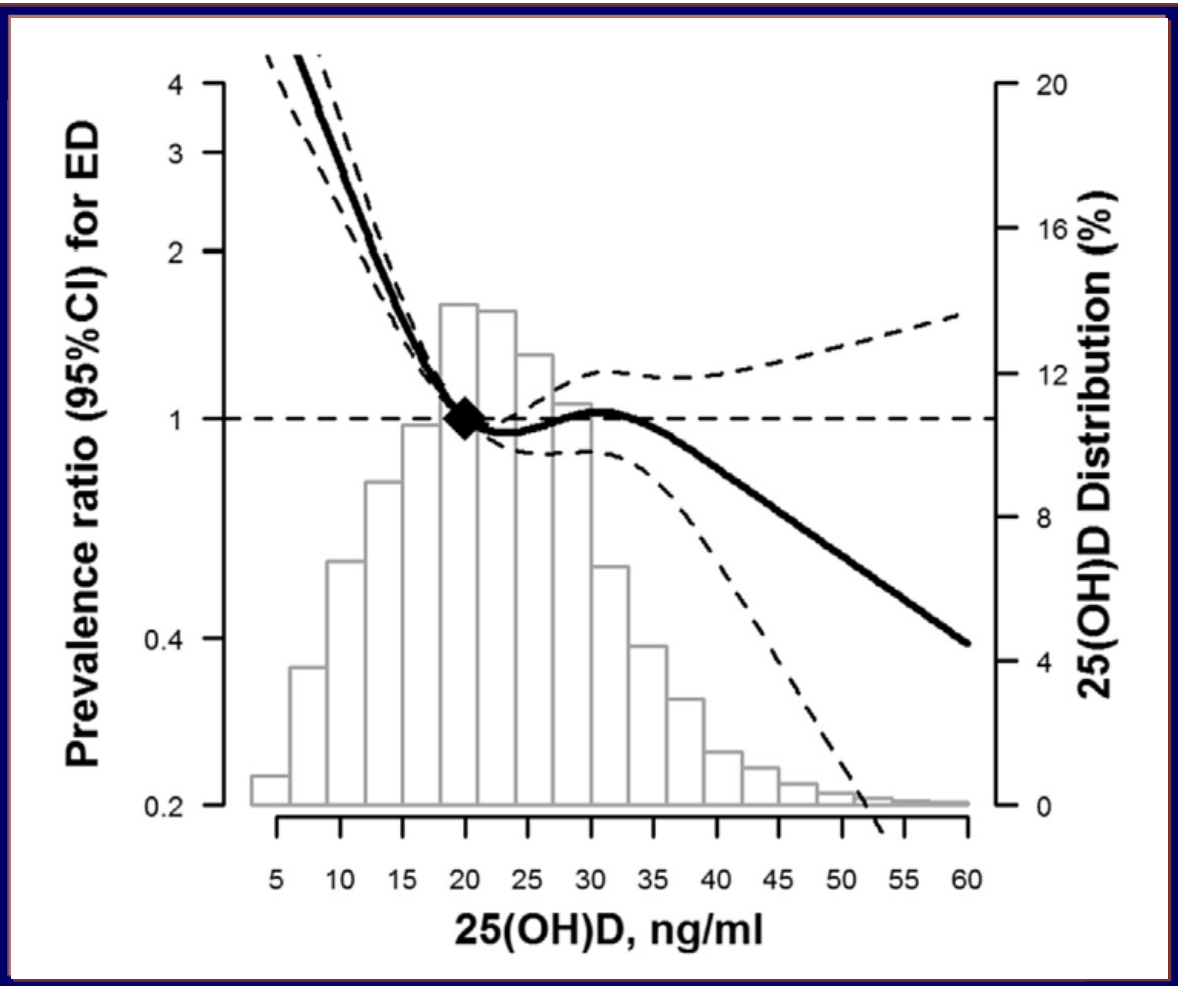
- Raccomandati glicemia e/o emoglobina glicosilata
  colesterolo, trigliceridi
  emocromo, creatinina, esame urine
  testosterone, prolattina

- Opzionali PSA, TSH, LH, SHBG, DEAS, estradiolo,
  transaminasi, uricemia, folatemia,
  25OHcolecalciferolo (vit.D)

Vitamin D deficiency is independently associated with greater prevalence of erectile dysfunction: The National Health and Nutrition Examination Survey (NHANES) 2001–2004

Atherosclerosis 252 (2016) 61–67

Youssef M.K. Farag [a, b], Eliseo Guallar [a], Di Zhao [a], Rita R. Kalyani [c], Michael J. Blaha [d], David I. Feldman [d, e], Seth S. Martin [a, d], Pamela L. Lutsey [f], Kevin L. Billups [g], Erin D. Michos [a, d, *]



Physical Examination and Laboratory Testing for Men with ED

J Sex Med 2013;10:108–110

Hussein M. Ghanem, MD,* Andrea Salonia, MD,† and Antonio Martin-Morales, MD‡

Table 2 Laboratory tests

Tests for risk factors for ED

- Laboratory assessment for diabetes (HbA1c or FBS)
- Total testosterone
- Prolactin
- Lipid profile

Optional tests

- Thyroid hormones
- PSA
- EKG and stress echocardiogram
- Luteinizing hormone
- Sex hormone binding globulin

ED = erectile dysfunction; EKG = electrocardiogram; FBS = fasting blood sugar; PSA = prostate-specific antigen

SEXUAL MEDICINE REVIEWS

The Present and Future of Human Sexuality: Impact of Faulty Perinatal Hormonal Imprinting

György Csaba, MD, PhD, DSc

ABSTRACT

Introduction: Hormonal imprinting occurs perinatally, when the developing hormone receptors connect to their target hormones. This is required for the normal development of the receptor-hormone connection. At this time, the selectivity of receptors is weak and can be misdirected to related endogenous or exogenous molecules, such as other members of the same hormone family, synthetic hormones, drugs, hormone-like environmental pollutants, and endocrine disruptors. In this situation, faulty hormonal imprinting develops with lifelong consequences, which are manifested by altered receptor binding capacity, hormone production, changed bone formation, and brain neurotransmitter content. The effect of faulty imprinting is epigenetically inherited and manifested in progeny.

Aim: To evaluate the effects of hormonal imprinting on sexuality based on published results.

Methods: Review of perinatal (mainly single) treatment of experimental animals with hormones or hormone-like materials and the study of their effects in adulthood and in progeny.

Main Outcome Measure: Consistency of experimental results with the previous information and expectations.

Results: In each published experiment, perinatal treatments with hormones acting on members of a steroid receptor superfamily or endocrine disruptors (eg, bisphenol A, vinclozolin, benzpyrene or soybean genistein) caused faulty imprinting with altered sexual hormone receptor binding and sexual function. Indices of sexual activity showed the strong influence of these treatments.

Conclusion: Sexuality is influenced by perinatal faulty hormonal imprinting at the receptor and behavioral levels. Because faulty imprinting is an epigenetic process, it is transmitted to the members of cell line and to progeny. In the modern age, the amount of artificial (industrial, communal, and medical) imprinters and their effects on the human organism are increasing enormously. This is likely to change human sexuality now and in the future.

Valutazione laboratoristica

L'ipogonadismo rappresenta una causa di DE; a tal fine è necessario includere nelle analisi ematochimiche:
-testosterone;
-prolattina (l'iperprolattinemia è causa di ipogonadismo ipogonadotropo);

-LH (valutare origine primaria o secondaria dell'ipogonadismo);
-emocromo e PSA, per avere valori basali prima di iniziare eventuale terapia con testosterone
-albumina ed SHBG per il calcolo del testosterone libero (formula indiretta di Vermuelen) per la scarsa affidabilità del dosaggio del testosterone libero tramite RIA

Ipogonadismo

Per la diagnosi di ipogonadismo sono necessari la presenza di sintomi e segni specifici in presenza di valori di testosterone totale (TT) ematici al di sotto di 8 nmol/L (2,3 ng/ml)

Segni e sintomi caratteristici sono:
-Disfunzione erettile;
-Riduzione della libido e/o dei pensieri sessuali;
-Riduzione delle erezioni mattutine spontanee

-Laddove il valore ematico di TT sia compreso fra 8 e 12 nmol/L (3,46 ng/ml) si suggerisce l'utilizzo del calcolo del testosterone libero (v.n. > 220/225 pmol/l)

Diagnosis and management of testosterone deficiency

James A McBride, Culley C Carson, Robert M Coward

Table 1: Comparison of different society guideline statements on testosterone diagnosis

	Clinical symptoms	*Clinical questionnaire*	*Serum total testosterone (ng dl^{-1})*	*Morning draw on 2 separate occasions*	*Free testosterone (pg ml^{-1})*
Endocrine society[23]	Yes	No	<300 (10.4 nmol l^{-1}) -or- Lab lower limit of normal	Yes	Calculated method preferred Lab lower limit of normal
EAU[24]	Yes	No	<349 (12.1 nmol l^{-1})	Yes	Calculated method preferred<63.5 (220 pmol l^{-1})
ICSM[78]	Yes	No	<230 230-350 (gray zone) >350 (no treatment)	Yes	Calculated method preferred<65 (225 pmol l^{-1})
Joint society[30]	Yes	No	<230 230-350 (gray zone) >350 (no treatment)	Yes	Equilibrium dialysis is gold standard Lab lower limit of normal

23. 2010 U.S. Endocrine Society Guidelines: Bhasin S, Cunningham GR, Hayes FJ, Matsumoto AM, Snyder PJ, *et al*. Testosterone Therapy in Adult Men with Androgen Deficiency Syndromes: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2010 Jun;95(6):2536-2559.
24. European Association of Urology (EAU): Dohle GR, Arver S, Bettocchi C, Kliesch S, Punab M, *et al*. Guidelines on male hypogonadism. Arnhem: European Association of Urology, 2012 p2-28.
78. International Consultation on Sexual Medicine (ICSM): Buvat J, Maggi M, Gooren L, Guay AT, Kaufman J, *et al*. Endocrine aspects of male sexual dysfunctions. J Sex Med. 2010 Apr;7(4 Pt 2):1627-1656.
30. International Society of Andrology (ISA), International Society for the Study of the Aging Male (ISSAM), EAU, European Academy of Andrology (EAA) and Americal Society of Andrology (ASA) Joint Recommendations: Wang C, Nieschlag E, Swerdloff R, Hermann BM, Hellstrom WJ, *et al*. Investigation, Treatment, and Monitoring of Late-Onset Hypogonadism in males: ISA, ISSAM, EAU, EAA, and ASA Recommendations. Eur Urol. 2009;55:121-30.
EAU: European Association Of Urology; ICSM: International Consultation on Sexual Medicine; ISA: International Society of Andrology; EAA: European Academy of Andrology; ASA: American Society of Andrology; ISSAM: International Society for the Study of the Aging Male

Testosterone totale (ng/dl)

> 350

12.0 nmol/L

230 - 350

8.0 nmol/L – 12.0 nmol/L

< 230

8.0 nmol/L

2008 European Academy of Andrology • *International Journal of Andrology* **32,** 1–10

Investigation, treatment and monitoring of late-onset hypogonadism in males C. Wang

Challenges in Testosterone Measurement, Data Interpretation, and Methodological Appraisal of Interventional Trials

Landon W. Trost, MD,[1,2] and John P. Mulhall, MD[2]

J Sex Med 2016;■:1–18.

Table 1. Summary of factors affecting testosterone variability

Variable	Impact on testosterone measurements
Acute and chronic disease	10%–30% decrease with acute respiratory illness in young men[35]
	Chronic illness and increasing medication usage associated with more rapid age-related decrease in T[36]
Age	T levels decrease with age[37-41]
	Factors contributing to age-related decrease in T include obesity, chronic disease, comorbid conditions, lifestyle choices, and medication use[42]
	Age as an independent factor resulting in T variation is debatable[39,42,43]
Assay techniques	IA vs MS results in −14.1% to 19.2% variability and ± 40% at T < 100 ng/dL[44,45]
	at low T, IA varies by 2.7- to 14.3-fold[46]
	Specimen handling, preparation, and commutability, calibration methods, and matrix interference introduce variability
	MS is gold standard for TT, equilibrium dialysis for fT
	Variability between calculated ft methods is ~14%, with empiric methods most concordant[47]
	Non-empiric ft calculations overestimate true value[47]
Diurnal variation	Peak concentration in morning
	Rapidly decreases after waking
	4 PM vs 8 AM values 20%–25% lower in 30- to 40-y-old men and 10% lower in 70-y-old men[48]
	SHBG, fT, and bioavailable T also vary diurnally
Ethnicity	Likely minimal to no clinically relevant impact
Genetics	Accounts for 42%–65% of T variability[49-52]
Geography	Could result in variations in T levels
	Hong Kong and Japan with ~20% higher T compared with Sweden, Tobago, and the United States[53]
Intraindividual	Repeated measurements vary 65%–153%[54]
	Up to 50% of men with T < 300 ng/dl will have T > 300 ng/dl on repeat testing[55]
	Averaging 2 and 3 tests decreases range variability by 30% and 43%, respectively[54]
Lifestyle factors	Obesity inversely associated with T
	4- to 5-point BMI increase associated with 10-y equivalent decrease in T[36]
	Loss of body fat increases T[56]
	Exercise increases T in intensity, duration, and age-dependent manner[57-60]
	Smoking has unclear effect on T, with contradictory studies available[36,61-65]
	Moderate alcohol intake likely does not significantly affect T[61-63]
Seasonal	Conflicting data on seasonal variability in T levels[66-70]

The International Society for Sexual Medicine's Process of Care for the Assessment and Management of Testosterone Deficiency in Adult Men

John D. Dean

J Sex Med 2015;12:1660–1686

Screening

Screening for TD in the general population is not recommended.

1a

<u>Systematic screening for TD should be undertaken in men with obesity, type 2 diabetes and the "metabolic syndrome."</u>

1a

Screening for TD should be undertaken in men who report symptoms or signs typically associated with TD, particularly sexual dysfunctions.

1b

Update: Hypogonadotropic Hypogonadism in Type 2 Diabetes and Obesity

Paresh Dandona and Sandeep Dhindsa

Division of Endocrinology, Diabetes, and Metabolism, State University of New York at Buffalo and Kaleida Health, Buffalo, New York 14209

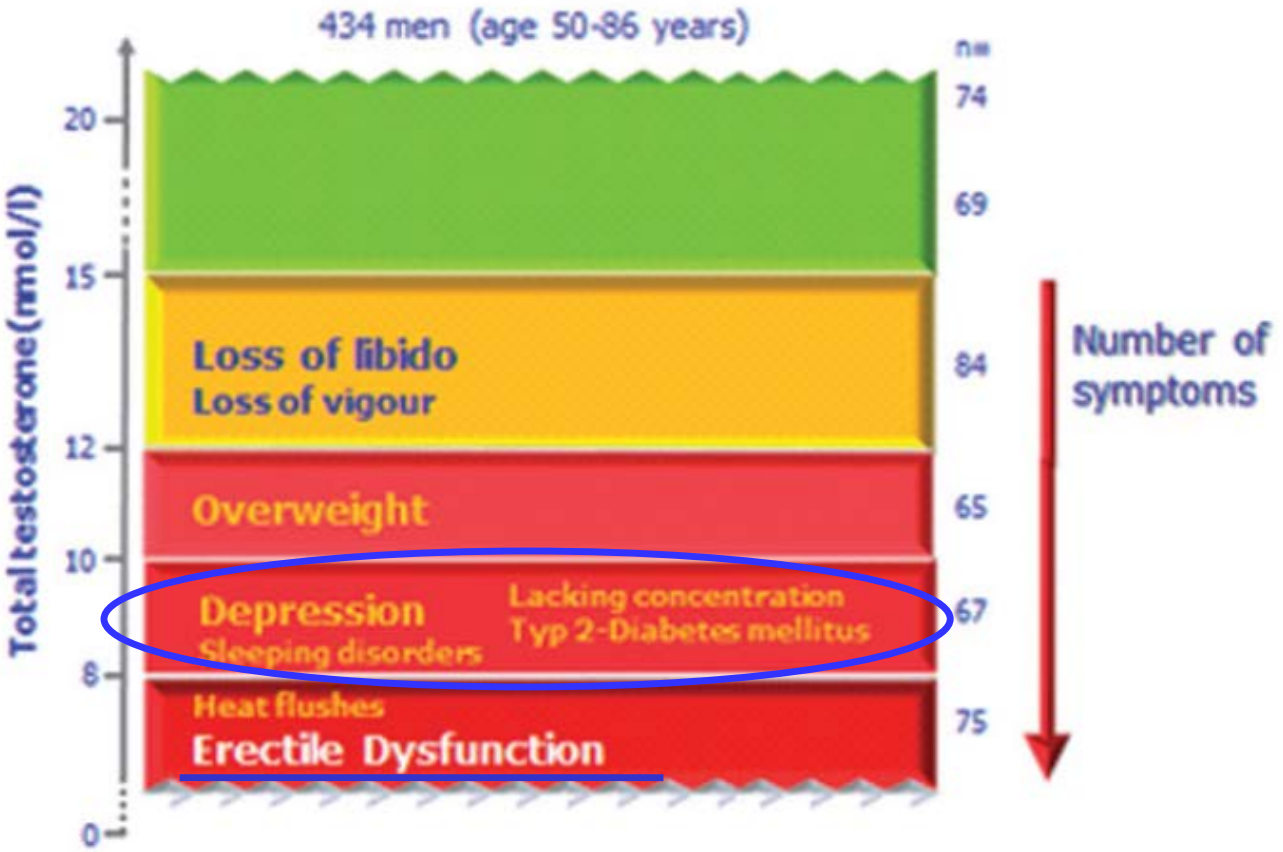
Studies over the last few years have clearly established that at least 25% of men with type 2 diabetes have subnormal free testosterone concentrations in association with inappropriately low LH and FSH concentrations. Another 4% have subnormal testosterone concentrations with elevated LH and FSH concentrations. The Endocrine Society, therefore, now recommends the measurement of testosterone in patients with type 2 diabetes on a routine basis. The subnormal testosterone concentrations are not related to glycosylated hemoglobin or duration of diabetes, but are associated with obesity, very high C-reactive protein concentrations, and mild anemia. In addition, subnormal testosterone concentrations in these men are associated with a two to three times elevated risk of cardiovascular events and death in two early studies. Short-term studies of testosterone therapy in hypogonadal men with type 2 diabetes have demonstrated an increase in insulin sensitivity and a decrease in waist circumference. However, the data on the effect of testosterone replacement on glycemic control and cardiovascular risk factors such as cholesterol and C-reactive protein concentrations are inconsistent. As far as sexual function is concerned, testosterone treatment increases libido but does not improve erectile dysfunction and thus, phosphodiesterase inhibitors may be required. Trials of a longer duration are clearly required to definitively establish the benefits and risks of testosterone replacement in patients with type 2 diabetes and low testosterone. (*J Clin Endocrinol Metab* 96: 2643–2651, 2011)

Recommendations on the diagnosis, treatment and monitoring of hypogonadism in men

Aging Male, 2015; 18(1): 5–15

Bruno Lunenfeld[1], George Mskhalaya[2], Michael Zitzmann[3], Stefan Arver[4], Svetlana Kalinchenko[5], Yuliya Tishova[5], and Abraham Morgentaler[6]

Testosterone levels and symptoms



Prevalence and prognosis of a low serum testosterone in men with type 2 diabetes: the Fremantle Diabetes Study Phase II

Emma J. Hamilton*,†, Wendy A. Davis*, Ashley Makepeace*,†, Ee Mun Lim‡, Bu B. Yeap*,†, Kirsten E. Peters* and Timothy M. E. Davis*

Clinical Endocrinology (2016) 85, 444–452

Table 2. Independent baseline associates of a total serum testosterone <10 nmol/l and <8·0 nmol/l

	Total serum testosterone <10 nmol/l		Total serum testosterone <8 nmol/l	
	Odds ratio (95% confidence interval)	*P*-value	Odds ratio (95% confidence interval)	*P*-value
Waist circumference (1 cm increase)	1·03 (1·02 to 1·05)	<0·001	1·02 (1·00 to 1·04)	0·045
eGFR <60 ml/min/1·73 m^2	1·96 (1·30 to 2·96)	0·001		
eGFR <45 ml/min/1·73 m^2			2·63 (1·14 to 6·06)	0·023
Ln(serum triglycerides) (mmol/l)*	1·60 (1·14 to 2·23)	0·006		
Peripheral sensory neuropathy	1·58 (1·12 to 2·24)	0·009	2·31 (1·33 to 4·00)	0·003
Total serum cholesterol (mmol/l)	0·80 (0·67 to 0·96)	0·016		
Insulin treatment	1·49 (1·03 to 2·16)	0·035		
Television viewing (1 h/week increase)			1·02 (1·00 to 1·04)	0·045

These data support a total serum testosterone threshold of <10 nmol/l for the identification of important biological consequences of testosterone deficiency complicating type 2 diabetes in men.

UK policy statements on testosterone deficiency

Geoffrey Hackett[1,2] | Michael Kirby[3,4] | David Edwards[5,6] | T. Hugh Jones[7,8,9]
Jonathan Rees[10,11] | Asif Muneer[6,12]

Int J Clin Pract 2017; 1–10

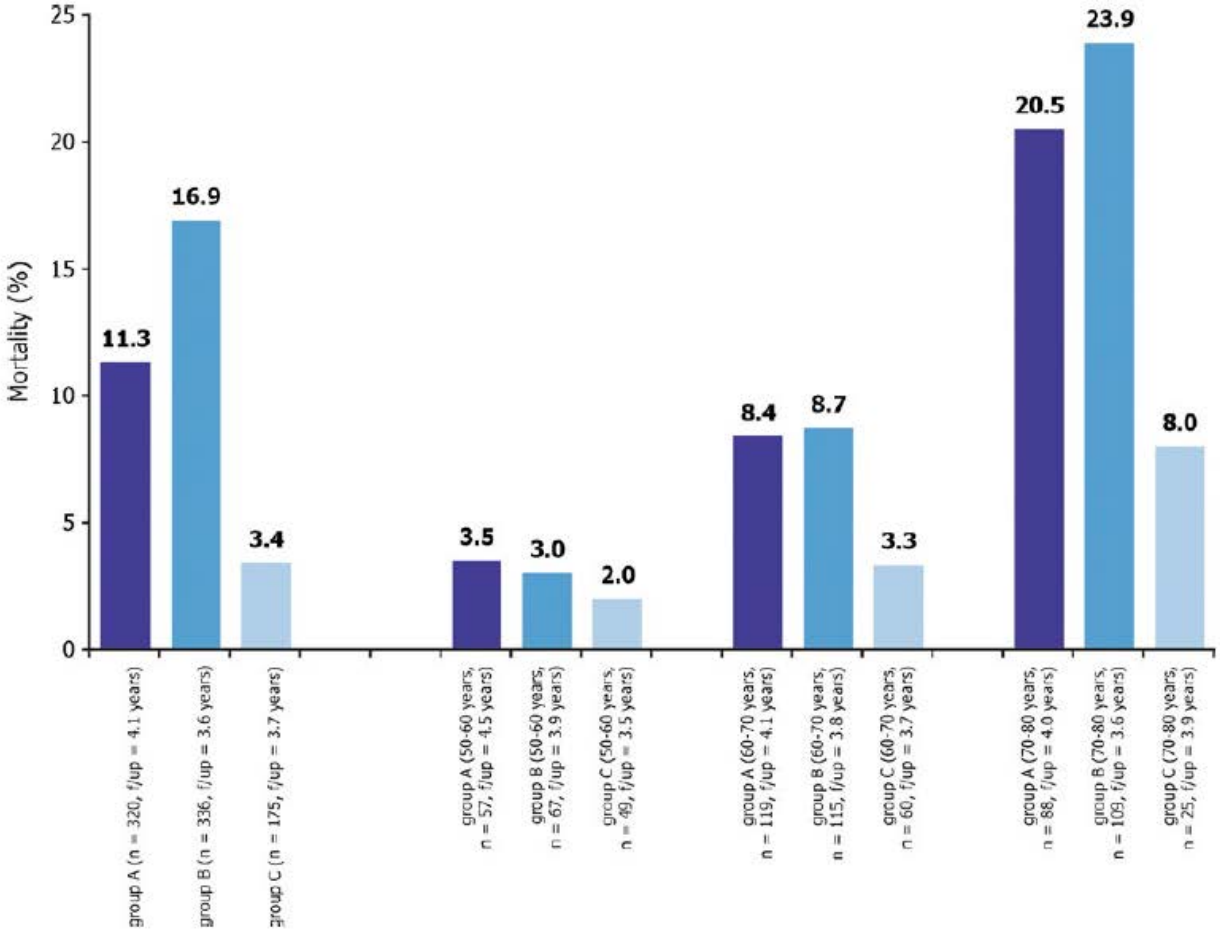


FIGURE 2 Trend for reduction in all-cause mortality in T2DM appears greatest in men over 75[33]. Mortality in patients categorised by: Group A = normal testosterone; B= low testosterone untreated; C = low testosteron

Valutazione dello stato vascolare

Test di farmaco infusione intracavernosa (FIC test)

Ecocolordoppler penieno basale e dopo test farmacologico

- **Pazienti giovani**
- **Pazienti con DE primaria**
- **Pazienti con DE post traumatica**
- **Pazienti che vogliono essere informati**

Arteriografia dell' arteria pudenda

Pazienti con disfunzione erettile su sospetta base arteriosa all' ecocolordoppler penieno

Cavernosometria - Cavernosografia Farmacologica

- **Pazienti con disfunzione erettile su sospetta base venosa all' ecocolordoppler penieno**

ECOCOLORDOPPLER PENIENO DINAMICO

Esame eseguito con apparecchiatura *real-time* con sonda lineare multifrequenza da 10 e 13 MHz.

L'esame ecotomografico ha evidenziato una normale conformazione del pene con aspetto ecograficamente fisiologico delle diverse strutture anatomiche.
I piani di scansione sia longitudinali che trasversali in condizioni di base documentano la normalità morfo-strutturale della fascia di Buck, dei corpi cavernosi e del corpo spongioso uretrale.
Il setto intercavernoso appare di spessore e costituzione normale in tutto il suo decorso.
Le arterie cavernose mostrano normali echi parietali e buona pulsatilità. L'arteria cavernosa destra ha un diametro di mm 1.1 prossimalmente (regione crurale) e di mm 0.8 distalmente (terzo medio); l'arteria cavernosa sinistra mm 1.2 prossimalmente e mm 0.8 distalmente.

FASE DINAMICA

Iniezione intracavernosa di PGE_1 10 µg (nel corpo cavernoso destro).

Diametro arterie cavernose:

art. cavernosa destra mm 2.3
art. cavernosa sinistra mm 2.3

Normale incremento dei diametri arteriosi con buona pulsatilità.

Valutazioni flussimetriche:

Arteria cavernosa destra	Arteria cavernosa sinistra
V.P.S.= 29.8 cm/s	V.P.S.= 30.2 cm/s
V.T.D.= 10.4 cm/s	V.T.D.= 10.1 cm/ s
I.R.= 0.65	I.R. = 0.66
S.R.T.= 108 msec	S.R.T.= 108 msec

Valutazioni flussimetriche:

Arteria cavernosa destra	Arteria cavernosa sinistra
V.P.S.= 29.8 cm/s	V.P.S.= 30.2 cm/s
V.T.D.= 10.4 cm/s	V.T.D.= 10.1 cm/ s
I.R.= 0.65	I.R. = 0.66
S.R.T.= 108 msec	S.R.T.= 108 msec

V.P.S.(velocità di picco sistolico) v.n. > 30 cm/s
V.T.D.(velocità telediastolica) v.n. < 5 cm/s
I.R. (indice di resistenza) v.n. 1.0-0.80
S.R.T. (tempo di innalzamento sistolico) v.n. < 110 msec
A.E. (angolo erettile) v.n. > 90°

COMMENTO ALLA FASE DINAMICA

Nella prima fase (fase di tumescenza precoce) si rileva un normale e progressivo aumento sia della componente sistolica della curva spettrale, sia di quella diastolica. Nella seconda fase (fase di tumescenza tardiva) si evidenziano normali valori di V.P.S. con lieve persistenza e mancato azzeramento dell'onda diastolica delle arterie cavernose. Nella norma la fase di accelerazione della curva spettrale con inclinazione superiore a 70°, buona la pulsatilità arteriosa. A.E. > 90°.

CONCLUSIONI

Nella norma lo studio morfo-strutturale penieno.
La valutazione color power doppler, e il tipo di risposta al test farmacologico depongono per funzionamento nei limiti della norma in merito al distretto arterioso penieno associato ad una lieve insufficienza del sistema veno-occlusivo cavernoso.

Valutazione dello stato vascolare

Ecocolordoppler penieno
basale e dopo test farmacologico

Farmaci utilizzati: PGE1, papaverina, fentolamina

Parametri di normalità

Velocità di picco sistolico (VPS): > 30 cm/sec

Velocità telediastolica (EDV): < 5 cm/sec

Indice di resistenza (VPS-EDV/VPS): > 0.90

L'esecuzione dell'ecocolordoppler penieno basale e dopo stimolazione farmacologica con alprostadil (2.5-20 microgrammi) oltre ad avere un ruolo diagnostico, assume anche un valore terapeutico in quanto consente di valutare la risposta erettile al farmaco eventualmente utilizzabile in terapia.

Inoltre permette anche di valutare il corretto dosaggio iniziale di un'eventuale terapia con alprostadil

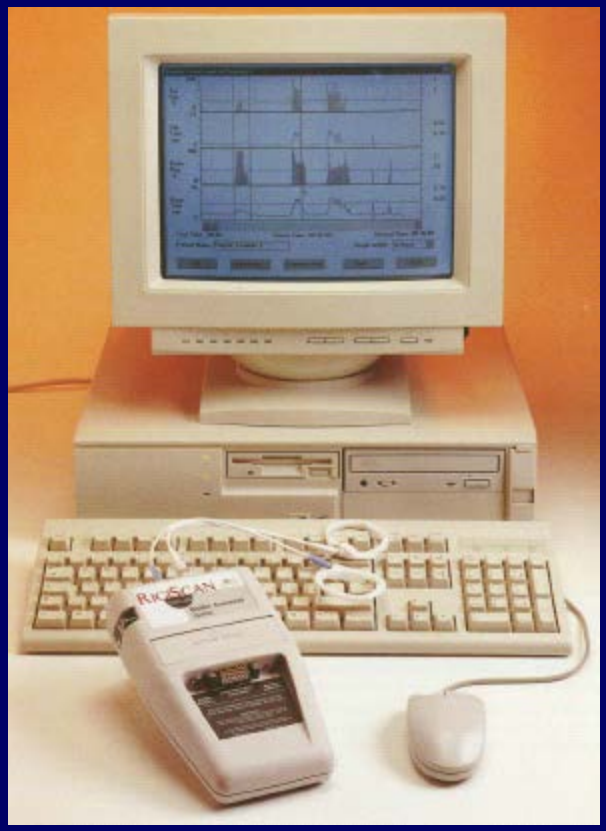
EVALUATION OF ERECTILE DYSFUNCTION AND SLEEP-RELATED ERECTIONS

CONSTANCE A. MOORE, IRVING J. FISHMAN
and MAX HIRSHKOWITZ

SLEEP-RELATED ERECTION TESTING

*Generally, **TWO STRAIN GAUGES** are used to record SREs. One is placed at the penile base and the other just behind the glans.*

As the penis becomes erect, it will also increase in circumference. As the gauges stretch, electrical resistances increase. The changes in resistance can be transduced to a calibrated voltage and displayed as a polygraphic signal.



Journal of Psychosomatic Research, Vol. 42, No. 6, pp. 531–539, 1997

RIGISCAN

MONITORAGGIO DELLE EREZIONI NOTTURNE

1 anello alla base ed 1 al solco balanoprepuziale

N. erezioni, circonferenza, rigidità per tre notti

RIGISCAN

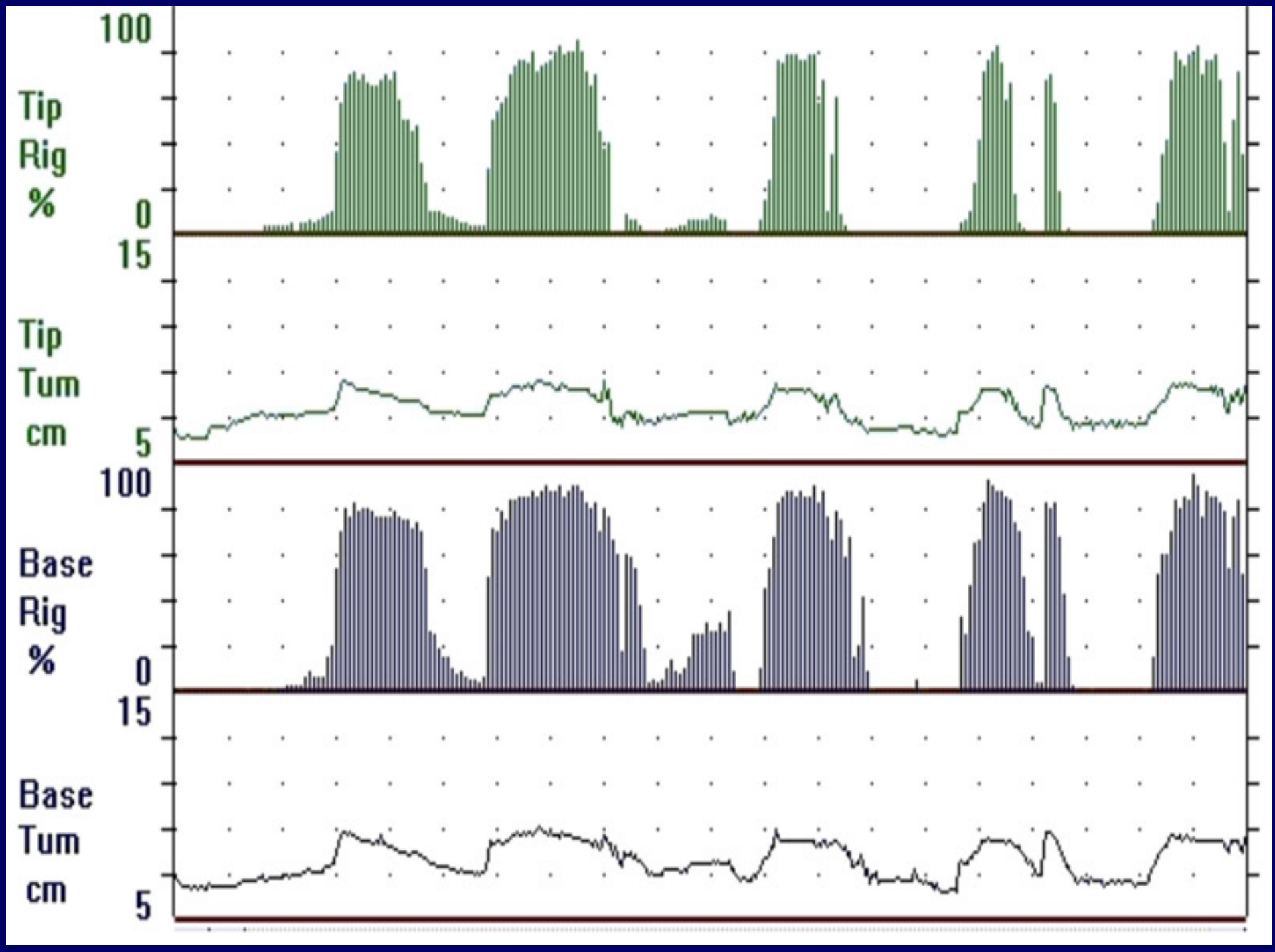
MONITORAGGIO DELLE EREZIONI NOTTURNE

1 anello alla base ed 1 al solco balanoprepuziale

N. erezioni, circonferenza, rigidità per tre notti

Parametri di normalità

Tre episodi erettili notturni con una durata per episodio di almeno 10 minuti, con un incremento della circonferenza peniena > di 3 cm alla base e > di 2 cm alla punta e con una rigidità > del 70%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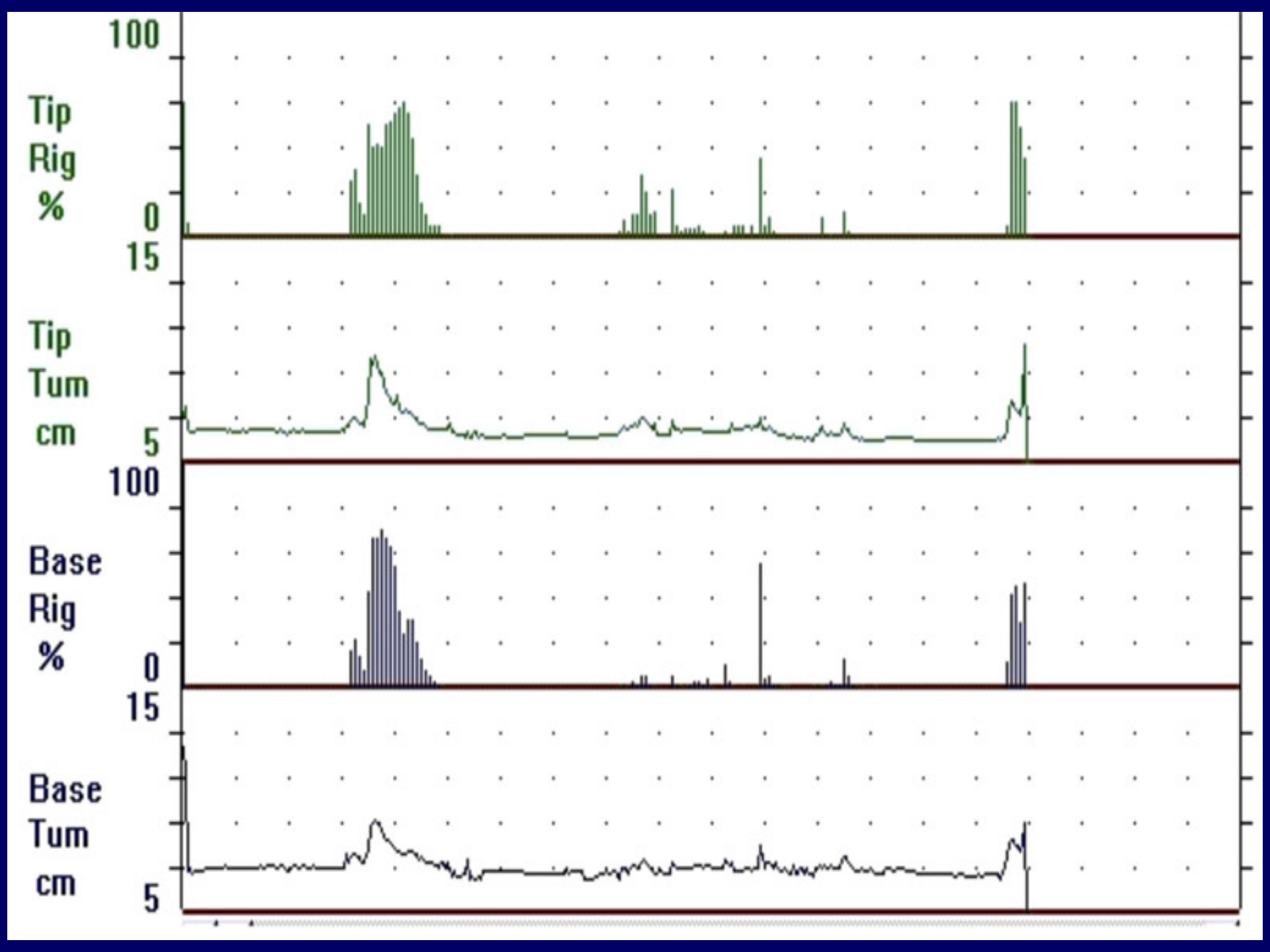
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Rigiscan Evaluation of Men with Diabetes Mellitus and Erectile Dysfunction and Correlation with Diabetes Duration, Age, BMI, Lipids and HbA1c

PLOS ONE | DOI:10.1371/journal.pone.0133121 July 17, 2015

Daniel Peter Andersson[1]*, Urban Ekström[2], Mikael Lehtihet[1,2]

Table 2. Comparison of Rigiscan parameters. Values reported are mean ± SD. Mann-Whitney U-test) was used to test the differences between the groups. Data was considered statistically significant at $P < 0.05$.

	Control (A)	Type 1 diabetes (B)	Type 2 diabetes (C)	A vs B	A vs C	B vs C
N	31	15	17			
Number of erectile episodes	4.8±1.4	3.4±1.2	2.9±1.5	<0.01	<0.001	0.31
Duration of erectile episodes (min)	132.7±53	104.4±45	73±44.9	0.078	<0.001	<0.05
Duration of rigidity > 60%	61.1±51.9	53.6±35.9	26.7±23.0	0.91	<0.05	<0.05
RAU tip	46.2±23.6	39.3±17.5	25.6±21.9	0.27	<0.01	<0.05
RAU base	63.8±26.9	58.7±27.5	36.1±25.5	0.65	<0.01	<0.05
TAU tip	31.3±16.7	21.3±9.6	20.1±15.0	0.067	<0.05	0.75
TAU base	51.4±23.7	34.3±20.0	31.9±23.2	<0.05	<0.01	0.43
Circumfere						<0.05
Circumfere						<0.05

Our results indicate that erectile dysfunction in men with diabetes differ between type 1 and type 2 diabetes patients. Neither diabetes duration nor HbA1C correlated to grade of erectile dysfunction among patients with diabetes. Increased BMI might be an explanation to the increased rate of erectile dysfunction seen in patients with type 2 diabetes.

Tratto dalle conclusioni del Dipartimento Urologia, IV Congresso della Corte di giustizia Popolare per il Diritto alla Salute (Rimini, 20-22 Novembre 2015), e condiviso da FIMMG, Senior Italia e le società scientifiche

Percorso di gestione primo - secondo livello della

Disfunzione Erettile

Esami di laboratorio (di primo livello):

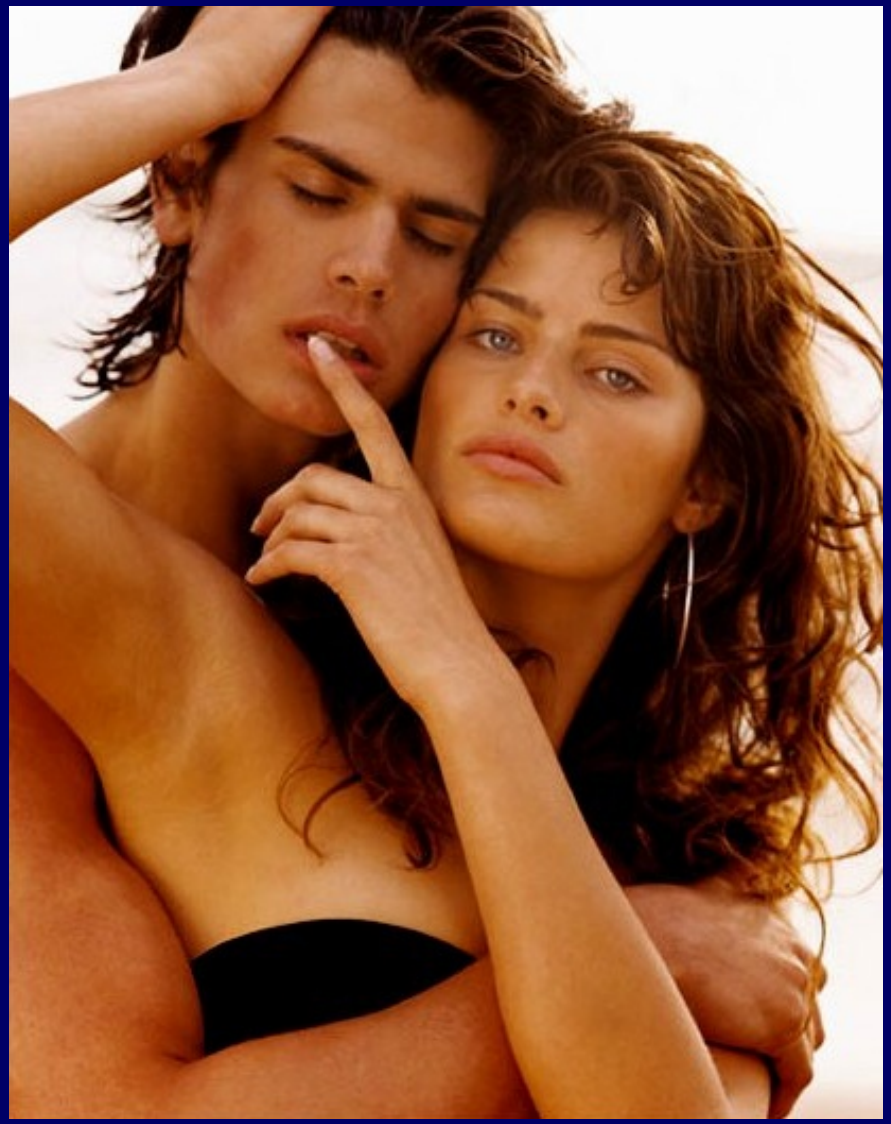
- Esame delle urine completo;
- Emocromocitometrico;
- Creatininemia;
- Quadro lipidico;
- Glicemia;
- Dosaggio del testosterone. (Qualora i livelli di testosterone risultino bassi si procede al dosaggio della sua frazione libera, free-testosterone, della prolattina e dell'ormone luteinizzante LH);
- ACTH solo se presenza di segni e sintomi suggestivi di Cushing;
- Dosaggio del PSA, solo prima di iniziare una terapia col testosterone e durante la terapia.

Indagini strumentali di primo livello:

- Ecografia dell'apparato urogenitale;
- Eventualmente l'eco(color)doppler penieno.

L’atto sessuale è un’aggressione che tende all’unione più stretta

FREUD



DISFUNZIONE ERETTILE: TERAPIA

Regular Intercourse Protects Against Erectile Dysfunction: Tampere Aging Male Urologic Study

Juha Koskimäki,
The American Journal of Medicine (2008) 121, 592-596

Table 3 Incidence Rate Ratio of Moderate or Complete Erectile Dysfunction by Frequency of Intercourse and Morning Erections in Men Free of Moderate or Complete Erectile Dysfunction at Baseline, Adjusted for Age, Diabetes, Heart Disease, Hypertension, Cerebrovascular Disease, Depression, Body Mass Index, and Smoking

Determinant	Baseline (No. of Men)	Cases (No. of Cases)	Incidence (per 1000, 95% CI)	Incidence Rate Ratio (95% CI)
Frequency of intercourse (No. per week)				
<1	73	24	79 (53-117)	2.20 (1.27-3.79)
1	375	55	32 (24-41)	1 (reference)
2	223	21	20 (13-30)	0.61 (0.35-1.07)
≥3	129	10	16 (9-30)	0.63 (0.31-1.29)
				$P_{trend} < .001$
Frequency of morning erections (No. per week)				
<1	351	54	33 (25-43)	0.88 (0.57-1.38)
1	161	22	29 (19-45)	0.96 (0.55-1.67)
2-3	289	41	31 (22-41)	1 (reference)
Daily	84	12	31 (17-54)	1.04 (0.53-2.06)
				$P_{trend} = .52$
Overall	890	131	32 (27-38)	

Review Article

Transl Androl Urol 2016;5(2):187-194

Can lifestyle modification affect men's erectile function?

Marah C. Hehemann[1], James A. Kashanian[2]

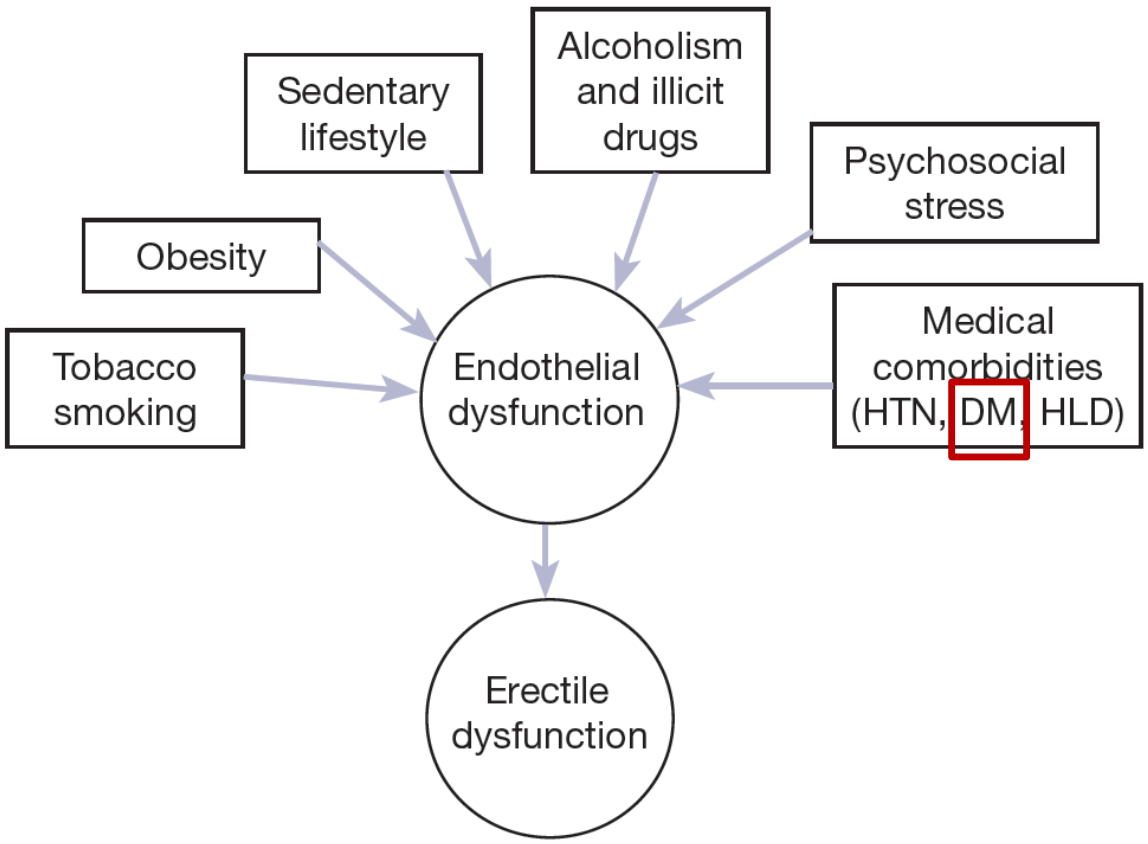


Figure 1 Relationship of modifiable risk factors and erectile dysfunction.

Effects of Mediterranean diet on sexual function in people with newly diagnosed type 2 diabetes: The MÈDITA trial

Maria Ida Maiorino [a,*], Giuseppe Bellastella [a], Mariangela Caputo [a], Filomena Castaldo [a], Maria Rosaria Improta [a], Dario Giugliano [a], Katherine Esposito [b]

Journal of Diabetes and Its Complications 30 (2016) 1519–1524

Table 3
Outcomes at the end of trial*.

	EOT	Change (95% CI)	EOT	Change (95% CI)	Difference (95% CI) between-group comparison of change	*P* value of comparison
	Men (Med diet)		Men (low-fat diet)			
IIEF	20.8 (2.2)	1.22 (0.80–1.64)	19.6 (2.9)	2.23 (1.6–2.82)	−1.16 (−2.16 to −0.15)	0.024
Weight (kg)	85.6 (9.8)	−3.7 (2.4)	86.9 (10.1)	−2.9 (2.3)	−0.82 (−1.5 to −0.1)	0.046
Waist (cm)	100 (11)	−3.2 (2.0)	101 (11)	−2.2 (2.1)	−1.0 (−2.0 to 0.0)	0.051
HbA1c (%)	6.91 (0.5)	−0.71 (0.31)	7.29 (0.41)	−0.41 (0.27)	−0.30 (−0.61 to −0.01)	0.048
TC (mg/dL)	215 (27)	−10 (9)	-208 (25)	−5 (5)	−5 (−10 to 1)	0.064
SBP (mm Hg)	138 (12)	−2.5 (2.9)	140 (13)	−0.7 (0.8)	−1.8 (−3.3 to −0.2)	0.039
CRP (mg/L)	2.2 (1.7–3.4)	0.31 (0.08–0.62)	2.35 (1.9–3.1)	0.03 (−0.21 to 0.26)	0.30 (0.02–0.58)	0.041
	Women (Med diet)		Women (low-fat diet)			
FSFI	25.1 (2.8)	1.13 (0.29–2.16)	23.9 (3.4)	2.25 (1.62–2.9)	−1.18 (−2.16 to −0.18)	0.019
Weight (kg)	78.9 (10)	−3.5 (2.6)	80.3 (11)	−2.7 (2.5)	−0.80 (−1.69 to −0.10)	0.048
Waist (cm)	92 (11)	−3.0 (2.4)	93 (11)	−2.5 (2.2)	−0.6 (−1.3 to 0.1)	0.065
HbA1c (%)	6.87 (0.4)	−0.69 (0.29)	7.30 (0.38)	−0.39 (0.25)	−0.30 (−0.060 to −0.01)	0.049
TC (mg/dL)	205 (29)	−9 (10)	210 (30)	−5 (4)	−5 (−12 to 2)	0.088
SBP (mm Hg)	136 (11)	−2.3 (2.5)	138 (12)	−0.6 (0.6)	−1.7 (−3.2 to −0.2)	0.045
CRP (mg/L)	2.45 (1.8–3.0)	0.41 (0.21–0.62)	2.8 (1.7–3.3)	0.1 (−0.1 to 0.28)	0.24 (−0.75 to 0.26)	0.348

MED = Mediterranean; EOT = end of trial; IIEF = International Index of Erectile Function; CRP = C-reactive protein; FSFI = Female Sexual Function Index; TC = total cholesterol; SBP = systolic blood pressure.

In conclusion, compared with low-fat diet, Mediterranean diet conferred benefit on sexual function deterioration in both men and women with newly diagnosed type 2 diabetes.

BJSM Online First, published on October 5, 2016 as 10.1136/bjsports-2016-096418

Physical activity and exercise for erectile dysfunction: systematic review and meta-analysis

André B Silva,[1] Nelson Sousa,[1,2] Luís F Azevedo,[3,4] Carlos Martins[1]

Summary box

- A systematic review and meta-analysis of seven randomised controlled trials of patients with erectile dysfunction.
- Different physical activity and exercise interventions increase short-term and long-term patient-reported erectile function in different patient population and treatment scenarios.
- The pooled evidence supports the need to review current recommendations for prescribing physical activity and exercise to patients with erectile dysfunction.

Effect of Intensive Glycemic Therapy on Erectile Function in Men With Type 1 Diabetes

THE JOURNAL OF UROLOGY® Vol. 185, 1828-1834, May 2011

Hunter Wessells,*,† David F. Penson, Patricia Cleary, Brandy N. Rutledge, John M. Lachin, Kevin T. McVary,‡ David S. Schade, Aruna V. Sarma and the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications Research Group

From the Department of Urology and Diabetes Endocrinology Research Center, University of Washington School of Medicine, Seattle, Washington (HW), Department of Urologic Surgery, Vanderbilt University, Nashville, Tennessee (DFP), The Biostatistics Center, The George Washington University, Rockville, Maryland (PC, BNR, JML), Department of Urology, Northwestern University, Chicago, Illinois (KTM), Department of Medicine/Division of Endocrinology and Metabolism, University of New Mexico School of Medicine, Albuquerque, New Mexico (DSS), and Departments of Urology and Epidemiology, University of Michigan, Ann Arbor, Michigan (AVS)

Results: Of the participants 23% reported erectile dysfunction. The prevalence was significantly lower in the intensive vs conventional treatment group in the secondary cohort (12.8% vs 30.8%, p = 0.001) but not in the primary cohort (17% vs 20.3%, p = 0.49). The risk of erectile dysfunction in primary and secondary cohorts was directly associated with mean HbA1c during the Diabetes Control and Complications Trial, and Epidemiology of Diabetes Interventions and Complications combined. Age, peripheral neuropathy and lower urinary tract symptoms were other risk factors.

Conclusions: A period of intensive therapy significantly reduced the prevalence of erectile dysfunction 10 years later among those men in the secondary intervention cohort but not in the primary prevention cohort. Higher HbA1c was significantly associated with risk in both cohorts. These findings provide further support for early implementation of intensive insulin therapy in young men with type 1 diabetes.

Vasculogenesis and Diabetic Erectile Dysfunction: How Relevant Is Glycemic Control?

Journal of Cellular Biochemistry 118:82–91 (2017)

Angela Castela,[1,2,3] Pedro Gomes,[4] Ricardo Silvestre,[5,6] Luísa Guardão,[7] Liliana Leite,[7] Rui Chilro,[8] Ilda Rodrigues,[1] Pedro Vendeira,[9] Ronald Virag,[10] and Carla Costa[1,3*]

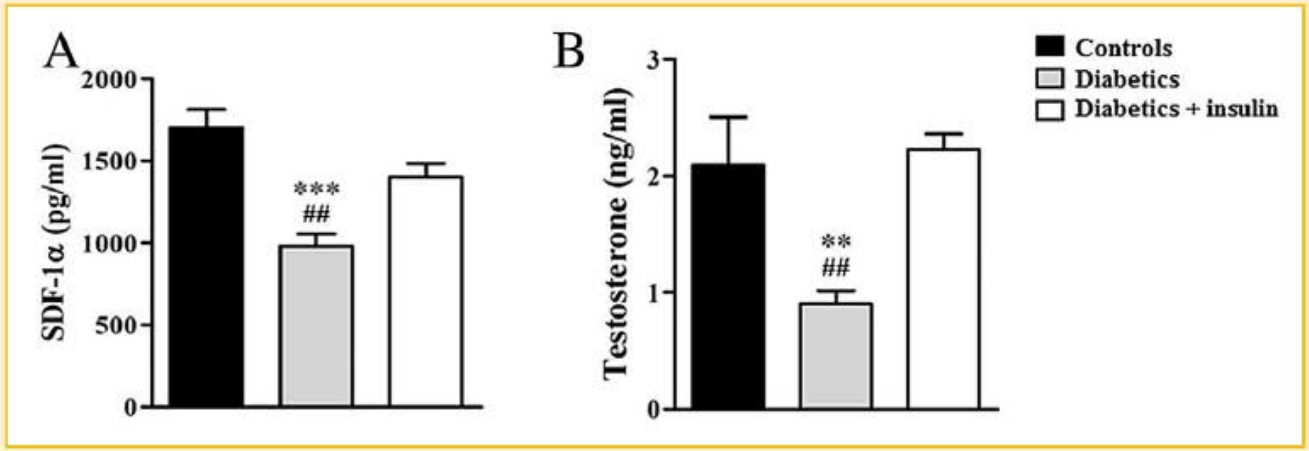


Fig. 3. Plasmatic quantification of SDF-1α and testosterone. (A) Diabetic animals presented a significant reduction in systemic SDF-1α and (B) testosterone. Insulin therapy prevented the effects of diabetes, increasing SDF-1α and testosterone levels. Data presented as Mean ± SE. ** $P < 0.01$, *** $P < 0.001$ diabetics compared to control group; ## $P < 0.01$ diabetic group compared to insulin-treated diabetics.

Insulin administration rescued the effects of diabetes on BM function, CECs levels, testosterone, and plasmatic/penile SDF-1a protein expression. This emphasizes the importance of glycemic control in the prevention of diabetes-induced systemic and penile EDys, by the amelioration of endothelial damage, and increase in protective pathways

DISFUNZIONE ERETTILE

Terapie……nel passato!

NOCE MOSCATA

PEPE ROSSO

OSTRICHE

AGLIO – PORRO

CIPOLLA

PINNA DI PESCECANE

CERVELLO DI UCCELLO

CORNO DI RINOCERONTE

ZUPPA DI LUCERTOLA

CORNO DI RENNA

Natural Aphrodisiacs

Rany Shamloul, MD

J Sex Med 2010;7:39–49

Table 1 Popular traditional aphrodisiacs plants and herbs

Plant	Nature and origin	Effects	*Type of studies	Mechanism of action
Myristica fragrans (nutmeg)	India, Indonesia, and Srilanka	Potentiates penile erection	*Animal [69,70]	Unknown
Camellia sinensis	Evergreen shrub or a tree; Southeast Asia	Delays ejaculation time	*Animal [71]	↑Testosterone
Aframomum melegueta and *Piper guineense*	Fruits; West Africa	Potentiates penile erection	*Animal [72,73]	Unknown
Curculigo orchioides (Kali Musli)	Rhizomes; India	Potentiates penile erection	*Animal [74,75]	?↑Testosterone
Microdesmis keayana	Roots; West Africa	Potentiates penile erection	*Animal [76,77]	?↑eNOS ?Antioxidant
Mucuna pruriens	Seeds; India	Potentiates penile erection	*Animal [78]	?↑Testosterone ?↑Brain dopamine
Eurycoma longifolia Jack (Tongkat Ali)	Shrub; Southeast Asia, especially Malaysia	Potentiates penile erection	*Animal [79–86]	Unknown
Ferula harmonis, "Zallouh Root"	Shrub root; Lebanon	Potentiates penile erection	**Animal [87–93]	?Indirect LH secretion ↓Smooth muscle contraction Many toxic effects ↓Female sexual function

"The current body of objective evidence does not support the use of any natural aphrodisiac as an effective treatment for male or female sexual dysfunctions. Potent men and men with ED will continue the search for natural aphrodisiacs despite the current disappointing data on their effectiveness."

Erectile dysfunction

Faysal A. Yafi

NATURE REVIEWS | DISEASE PRIMERS VOLUME 2 | 2016 | 1

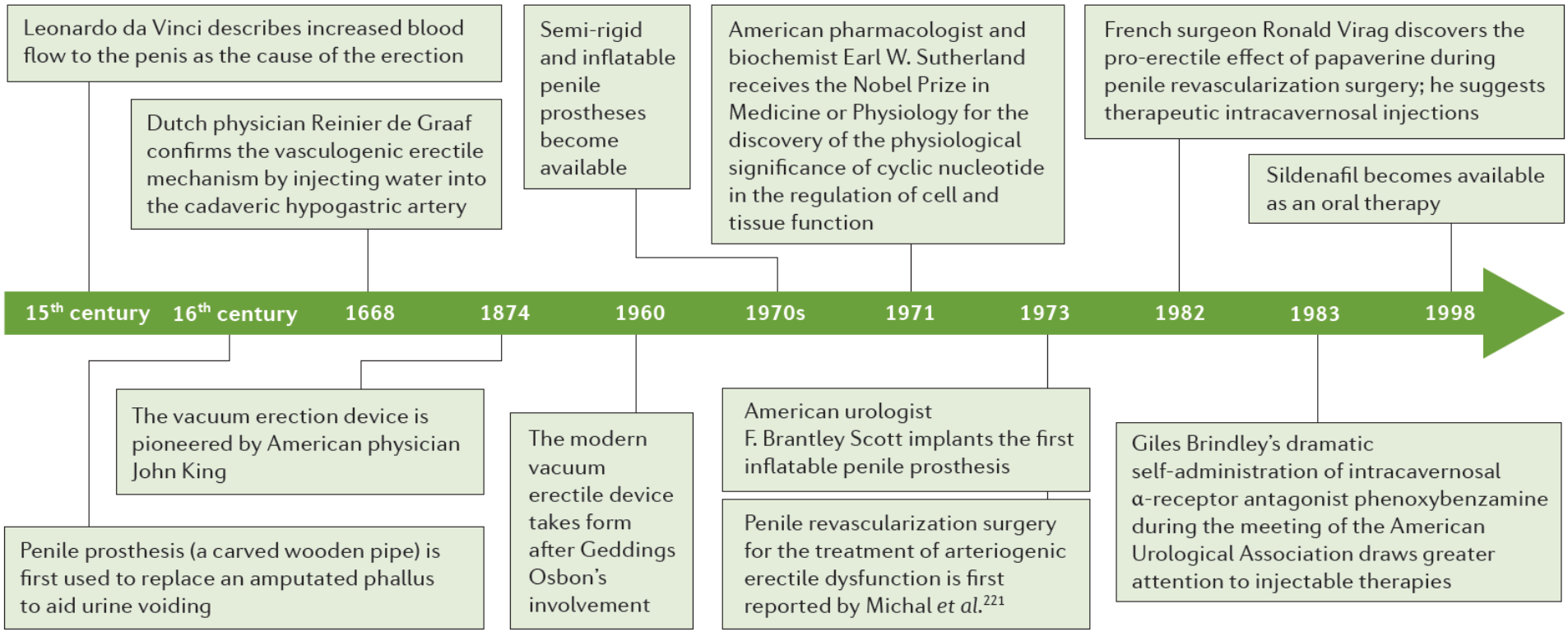


Figure 1 | **Timeline of the understanding and treatment of erectile dysfunction.** As it became understood that an erection is a predominantly vasculogenic process, filling the cavernosal bodies with blood became one of the key features of different modalities of treatment of erectile dysfunction. For example, the vacuum erection device of today took form when tyre technician Geddings Osbon invented the youth equivalency device in 1960, which combines the effect of a vacuum that draws blood into the penis and the penile ring placed at the base of the penis to occlude venous return. Injectable therapies became prominent following the infamous Brindley lecture 'Cavernosal α-blockade: a technique for treating erectile impotence' at the American Urological Association Meeting in Las Vegas, Nevada, USA, in 1983 (REF. 222).

Novel therapeutic targets for erectile dysfunction

Steve K. Williams, Arnold melman*

Maturitas 71 (2012) 20–27

Department of Urology, Albert Einstein College of Medicine, Bronx, NY, United States

BMJ Open

Acupuncture for erectile dysfunction: a systematic review protocol

Xiaoming Cui,[1,2] Xiaoli Li,[2] Weina Peng,[1] Jing Zhou,[1,2] Jinna Yu,[1] Yongming Ye,[1] Zhishun Liu[1]

To cite: Cui X, Li X, Peng W, *et al*. Acupuncture for erectile dysfunction: a systematic review protocol. *BMJ Open* 2015;**5**:e007040. doi:10.1136/bmjopen-2014-007040

► Prepublication history for this paper is available online. To view these files please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2014-007040).

Received 28 October 2014
Revised 16 February 2015
Accepted 17 February 2015

ABSTRACT

Introduction: This systematic review protocol aims to provide a protocol for assessing the safety and effectiveness of acupuncture for the treatment of erectile dysfunction(ED). Previous systematic reviews did not draw convincing conclusions owing to high heterogeneity and few included randomised controlled trials, so it is necessary to reassess the efficacy and safety of acupuncture for ED.

Methods and analysis: Eight electronic databases will be searched: the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, PubMed, EMBASE, PsycInfo, the Chinese Biomedical Literature Database (CBM), the Chinese Medical Current Content (CMCC) and the China National Knowledge Infrastructure (CNKI). Related Chinese literature will be searched in other Chinese databases. All relevant randomised controlled trials in English or Chinese

Strengths and limitations of this study

- Study selection, data extraction and quality assessment will be performed independently by two researchers, which will ensure that all relevant studies are included without personal biases.
- Medical databases in other languages (eg, Korean and Japanese) will not be searched because of language barriers, so language bias may exist.
- There may be high heterogeneity from the various evaluation standards in different acupuncture therapies.

The pathophysiology of ED may include arterial, neurogenic, hormonal, cavernous, iatrogenic and psychogenic causes.[7] ED can

SEXUAL MEDICINE REVIEWS

Stem Cells in Male Sexual Dysfunction: Are We Getting Somewhere?

Mohammad Ayodhia Soebadi, MD,[1,2] Uros Milenkovic, MD,[1] Emmanuel Weyne, MD,[1] Fabio Castiglione, MD,[1] and Maarten Albersen, MD, PhD[1]

ABSTRACT

Introduction: Stem cells for sexual disorders are steadily being introduced into clinical trials. Two conditions of importance are the main target for this line of treatment, especially when regarding the wide array of translational and basic science highlighting the potential advantages of regenerative therapy: erectile dysfunction (ED) and more recently Peyronie disease (PD). Cellular therapy offers a treatment modality that might reverse disease progression. It would be used in a curative setting, in contrast to other pharmaceutical agents that are currently available.

Aim: To review basic preclinical studies and recent clinical trials of stem cells on ED and PD.

Methods: A search of the medical literature for the following terms was performed using PubMed: *stem cells, cellular therapy, erectile dysfunction, Peyronie's disease,* and *clinical trial.*

Main Outcome Measures: A non-systematic narrative review and critical reflection on preclinical and clinical studies administering stem cells for ED and PD in animal models and human subjects.

Results: Numerous studies have confirmed the beneficial functional effects of stem cell injection in established animal models on ED and PD. Various stem cell types have been adopted, from embryonic to adult mesenchymal cell types. Each cell type offers distinctive advantages and disadvantages. Diverse administrations of stem cells were investigated, with insignificant variability in the ultimate results. Stem cells appear to have a pronounced paracrine effect, rather than the classic engraftment and differentiation hypothesis. Phase 1 clinical trials using stem cells have not reported any severe adverse events in animals. However, these results cannot be extrapolated to draw any conclusions about efficacy in human patients.

Conclusion: Stem cells have an established efficacy in preclinical studies and early clinical trials. Studies are currently being published demonstrating the safety of intrapenile injection of autologous bone marrow- and adipose tissue-derived stem cells.

Management of Erectile Dysfunction

JOEL J. HEIDELBAUGH, MD, *University of Michigan, Ann Arbor, Michigan*

American Family Physician www.aafp.org/afp *Volume 81, Number 3 • February 1, 2010*

SORT: KEY RECOMMENDATIONS FOR PRACTICE

Clinical recommendation	*Evidence rating*	*References*
Diagnostic testing for erectile dysfunction should usually be limited to obtaining a fasting serum glucose level and lipid panel, thyroid-stimulating hormone test, and morning total testosterone level.	C	8
First-line therapy for erectile dysfunction should consist of oral phosphodiesterase type 5 inhibitors.	A	8, 14, 17
Phosphodiesterase type 5 inhibitors are most effective in the treatment of erectile dysfunction associated with diabetes mellitus and spinal cord injury, and of sexual dysfunction associated with antidepressants.	A	9, 12, 17, 19-21
Additional therapy for erectile dysfunction may consist of psychosocial therapy and testosterone supplementation in men with hypogonadism.	B	8, 13, 36
Testosterone supplementation in men with hypogonadism improves erectile dysfunction and libido.	B	13, 29
Screening for cardiovascular risk factors should be considered in men with erectile dysfunction.	C	39

A = consistent, good-quality patient-oriented evidence; B = inconsistent or limited-quality patient-oriented evidence; C = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to http://www.aafp.org/afpsort.xml.

First-line therapy for ED consists of lifestyle changes, modifying drug therapy that may cause ED, and pharmacotherapy with phosphodiesterase type 5 inhibitors.

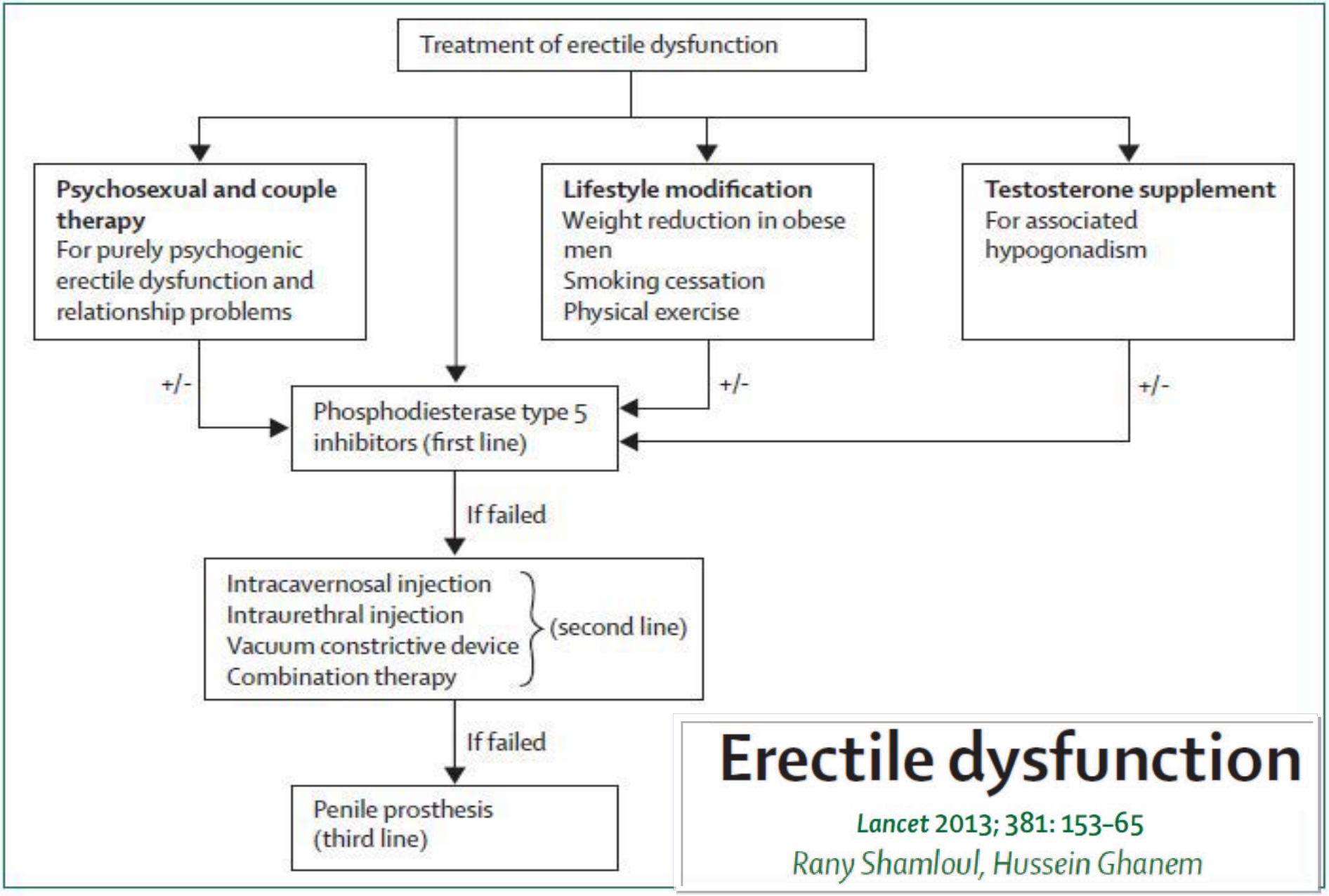


Figure 4: **Algorithm for the treatment of erectile dysfunction**
Lifestyle modification, testosterone supplementation, and psychosexual therapy can all be associated with medical treatment for erectile dysfunction.

Oral PDE inhibitors are a convenient, efficacious, and widely available treatment option for erectile dysfunction. They are contraindicated in patients taking nitrates, in patients in whom vasodilatation or sexual activity is inadvisable, and in those with a history of non-arteritic optic neuropathy. PDE inhibitors should be used with caution in patients with renal or hepatic impairment, recent stroke, myocardial infarction, or unstable angina and in those taking α blockers for lower urinary tract

CLINICAL REVIEW

Erectile dysfunction

Asif Muneer *consultant urological surgeon and andrologist*[1], Jas Kalsi *consultant urological surgeon and andrologist*[2], Irwin Nazareth *professor of primary care and population science*[3], Manit Arya *senior lecturer and honorary consultant urological surgeon*[4]

Table 2| **Most common oral phosphodiesterase type 5 inhibitors used as first line treatment of erectile dysfunction in primary care**

Oral drugs	Dose (mg)	Time to onset (min)	Half life (h)	Duration of action (h)
Sildenafil citrate (Viagra)	25-100 on demand	30-60	4	4-8
Tadalafil (Cialis)	5 daily or 10-20 on demand	45	17.5	24-36
Vardenafil hydrochloride (Levitra)	10-20 on demand	25-40	4-5	6

European Association of Urology 2015

MALE SEXUAL DYSFUNCTION - UPDATE MARCH 2015

3A.4.8 ***Recommendations for the treatment of ED***

	LE	GR
Lifestyle changes and risk factor modification must precede or accompany ED treatment.	1a	A
Pro-erectile treatments have to be given at the earliest opportunity after RP.	1b	A
When a curable cause of ED is found, it must be treated first.	1b	B
PDE5Is are first-line therapy.	1a	A
Inadequate/incorrect prescription and poor patient education are the main causes of a lack of response to PDE5Is.	3	B
A VED can be used in patients with a stable relationship.	4	C
Intracavernous injection is second-line therapy.	1b	B
Penile implant is third-line therapy.	4	C

ED = erectile dysfunction; RP = radical prostatectomy; VED = vacuum erection devices; PDE5I = phosphodiesterase type 5 [inhibitors].

2015 CUA Practice guidelines for erectile dysfunction

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See related article on page 30.

Cite as: *Can Urol Assoc J* 2015;9(1-2):23-9. http://dx.doi.org/10.5489/cuaj.2699
Published online February 5, 2015.

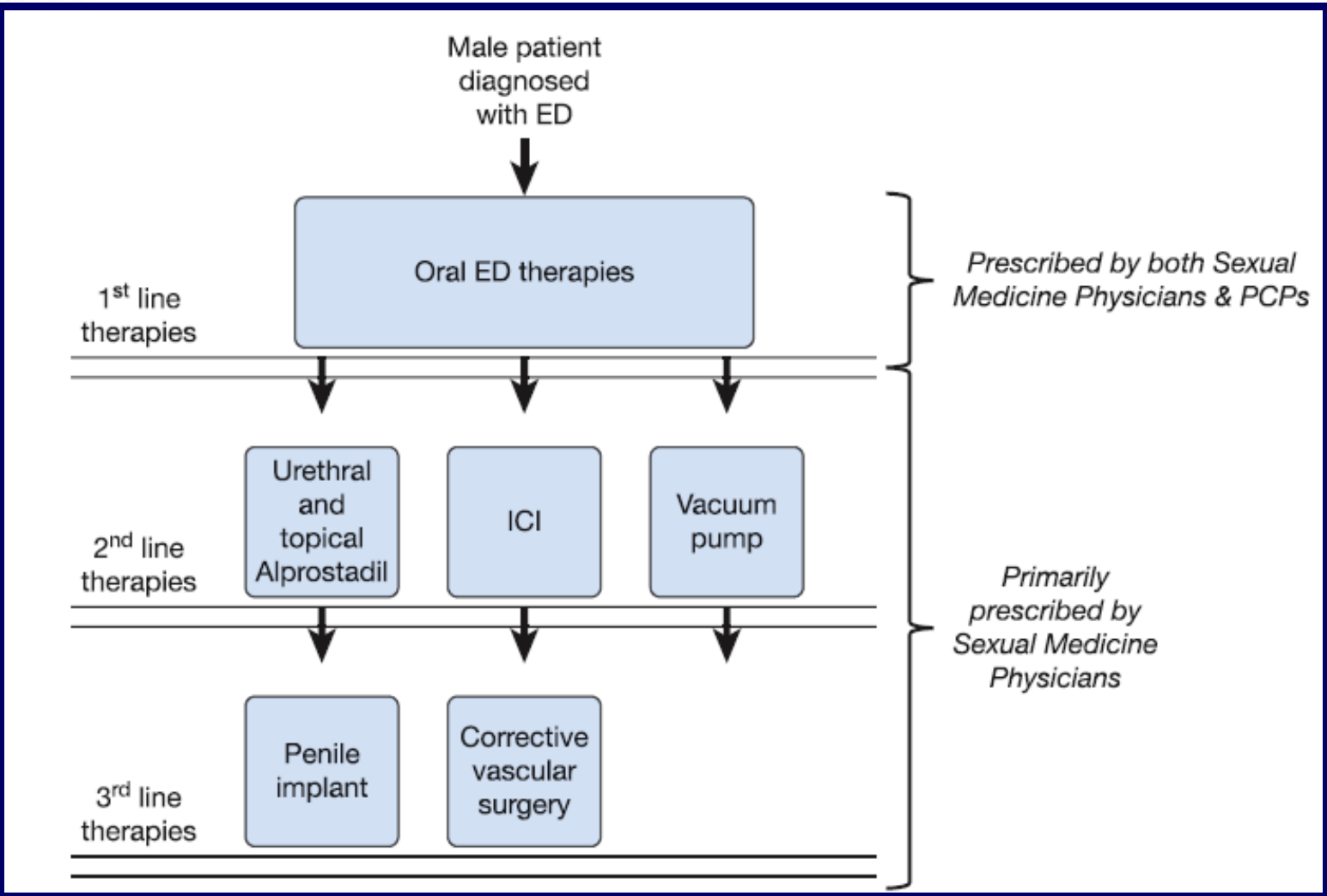
Summary of recommendations

- Erectile dysfunction (ED) is the preferred clinical term describing the persistent or recurrent inability to achieve and maintain a penile erection of sufficient rigidity to permit satisfactory sexual activity for at least 3 months.
- The initial diagnosis and treatment of ED is most commonly performed in Canada by primary care physicians (PCPs).
- PCPs, urologists, internists, psychiatrists, and other treating healthcare professionals should be encouraged to initiate an open dialogue of sexual issues to identify men with ED who may not otherwise volunteer their sexual concerns.
- Frequently a careful history, physical exam, serum glucose or hemoglobin A1C, lipid profile and optional hormonal testing facilitate the diagnosis of ED and effective therapy. Patient history can differentiate ED from other male sexual dysfunctions, including ejaculatory disorders (premature ejaculation and other abnormalities), hypogonadism, disorders of orgasm, and Peyronie's disease.
- Organic (physical) causes of ED are present in most men, but situational or psychosocial contributing factors often play a contributory role. Addressing these issues may enhance treatment efficacy.
- Underlying risk factors associated with ED are common to cardiovascular disease in general, and should be identified during evaluation as they may represent the initial clinical sign of generalized endothelial disease (vascular insufficiency). Evaluation of family history, nicotine use, blood pressure, lipid profile, and glucose is required or should be documented if previously performed. Active management of identified cardiac risk factors should be instituted (i.e., smoking cessation, blood pressure treatment).
- Once reversible causes of ED are ruled out, a trial of oral medication is recommended as first-line therapy, based on treatment efficacy, side effect profile, and minimal invasiveness. Specialized testing and referral are generally reserved for cases where oral first-line treatments fail or are not appropriate, of if greater insight into the etiology is desired by the patient/physician.
- Second-line therapies, although more invasive than oral agents, are generally well-tolerated and effective.
- Surgery remains an important option for men refractory to medical management, offering effective and durable ED treatment outcomes.

Pharmacotherapy for Erectile Dysfunction: Recommendations From the Fourth International Consultation for Sexual Medicine (ICSM 2015)

Konstantinos Hatzimouratidis, MD,[1] Andrea Salonia, MD,[2] Ganesan Adaikan, MD,[3] Jacques Buvat, MD,[4] Serge Carrier, MD,[5] Amr El-Meliegy, MD,[6] Andrew McCullough, MD,[7] Luiz Otavio Torres, MD,[8] and Mohit Khera, MD[9]

J Sex Med 2016;13:465–488.



Internal Medicine Journal **44** (2014)

CLINICAL PERSPECTIVES

Erectile dysfunction

C. G. McMahon

Australian Centre for Sexual Health,

Table 3 Guidelines for prescribing ED treatment in patients with cardiac disease

Risk	Cardiac status	Management
Low	• Controlled hypertension • Mild valvular disease • Mild stable angina • Post-revascularisation	Manage in primary care
Moderate	• Recent MI or cerebrovascular accident (6 weeks) • Congestive heart failure • Murmur of unknown cause • Moderate stable angina	Specialised evaluation recommended
High	• Uncontrolled angina • Uncontrolled hypertension • Severe heart failure • Recent MI or cerebrovascular accident (2 weeks) • High-risk arrhythmia • Hypertrophic cardiomyopathy • Moderate/severe valve disease	Refer for cardiac opinion

OPZIONI TERAPEUTICHE

- Terapia farmacologica sistemica e locale
- Vacuum device (Meccanismi di pompa a vuoto)
- Dispositivi di costrizione venosa
- Psicoterapia, Terapia sessuologica
- Impianto di protesi peniene
- Interventi di rivascolarizzazione arteriosa
- Interventi di legatura venosa

Figure 2. Erec-Tech vacuum therapy system.

Figure 3. Coloplast Alpha-1 inflatable penile prosthesis.

Biofilm and Infectious Agents Present at the Time of Penile Prosthesis Revision Surgery: Times Are a Changing

Lauren E. Dawn, BS,[1] Gerard D. Henry, MD,[1] Gary K. Tan, DO,[2] and Steven K. Wilson, MD, FACS, FRCS[3]

ABSTRACT

Introduction: Although infection rates have decreased with the use of antibiotic-coated implants and other enhancements, the risk of infection is still considered a serious concern in penile implant revision surgeries.

Aim: To review the literature for advances made in inflatable penile prosthesis (IPP) revision surgery and organisms found at the time of revision, the significance of biofilm in prosthetic infection, and the bacteriology of infection.

Methods: PubMed was reviewed for articles spanning the past three decades that discussed micro-organisms and biofilm in relation to penile implant revision surgery.

Main Outcome Measures: All articles were reviewed for evidence of bacteria found at revision IPP surgeries and any improvements made in surgical techniques and prosthesis enhancements.

Results: During the period examined, several improvements have lowered the rate of infection in penile implant surgery: notably, antibiotic-coated IPPs, revision washout, and alcohol-based skin preparations. The biofilm composition on clinically uninfected and infected IPPs appears to have changed over time. The abundance of staphylococcal species—particularly coagulase-negative organisms—in positive cultures has decreased in infected implants, and clinically uninfected implants also have shown a decrease in the proportion of staphylococcal species. Conversely, other isolates such as fungi, *Escherichia coli,* and *Enterococcus* species have increased in clinically uninfected and infected implants, and there has been an overall increase in unique isolates that form the biofilm.

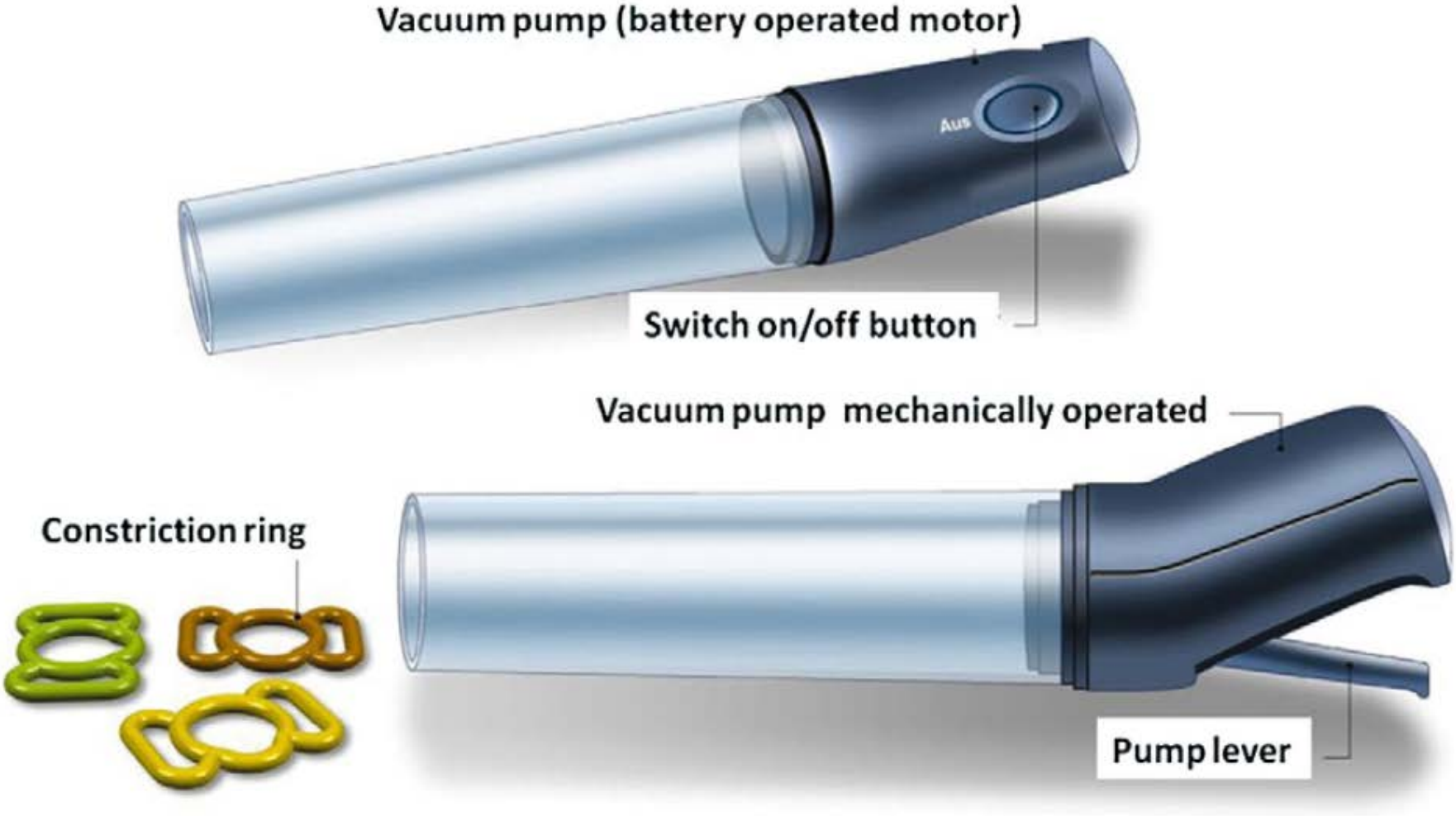
Conclusion: A multitude of enhancements has decreased the presence of micro-organisms and the subsequent formation of biofilm. Nevertheless, the formation of biofilm on penile implants has been noted more frequently in the past decade, and the microbial composition of biofilms seems to be changing. **Dawn LE, Henry GD, Tan GK, Wilson SK. Biofilm and Infectious Agents Present at the Time of Penile Prosthesis Revision Surgery. Times Are a Changing. Sex Med Rev 2017;X:XXX–XXX.**

Fermare la diffusione del sapere è uno strumento di controllo per il potere perché conoscere è saper leggere, interpretare, verificare di persona e non fidarsi di quello che ti dicono. La conoscenza ti fa dubitare. Soprattutto del potere. Di ogni potere

"Essere giovani vuol dire tenere aperto l'oblò della speranza, anche quando il mare è cattivo e il cielo si è stancato di essere azzurro."

SOP Conservative (Medical and Mechanical) Treatment of Erectile Dysfunction

Porst ISSM Standards Committee for Sexual Medicine J Sex Med 2013;10:130



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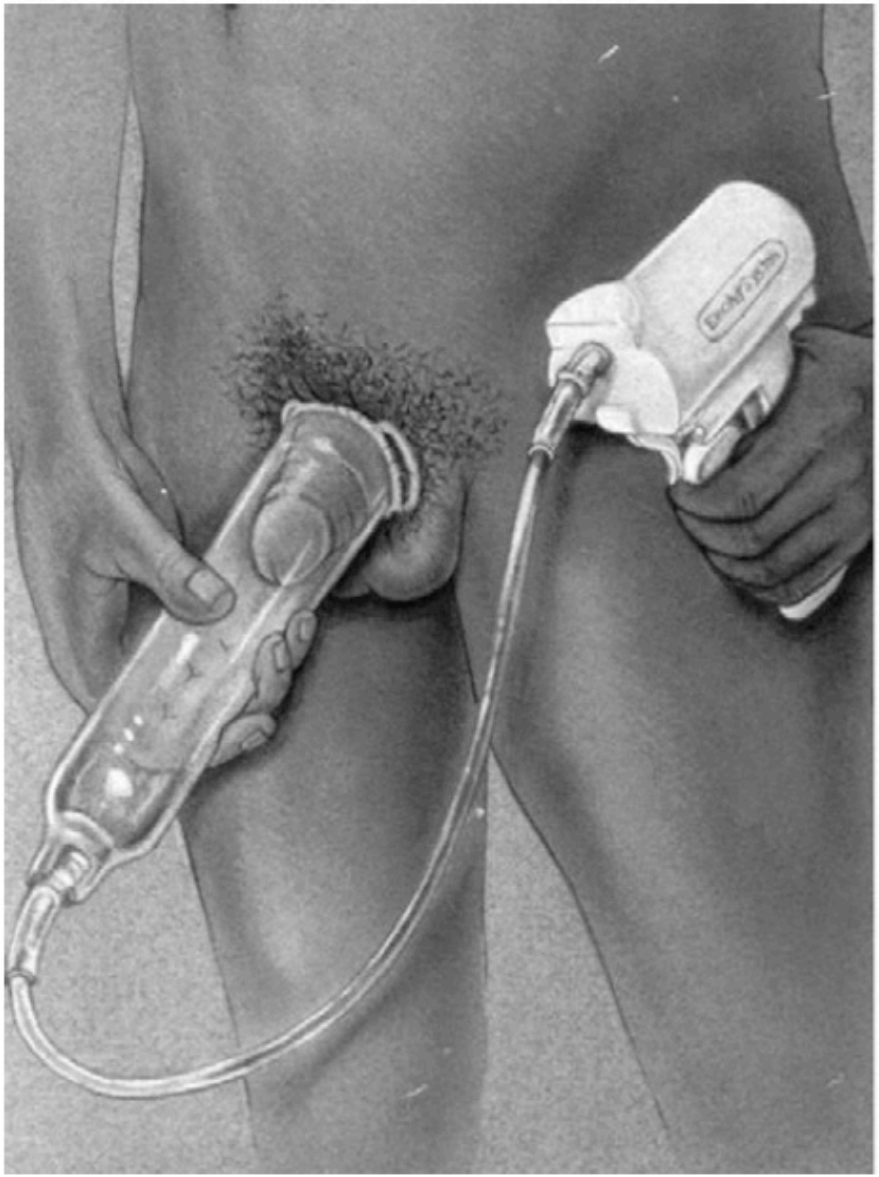

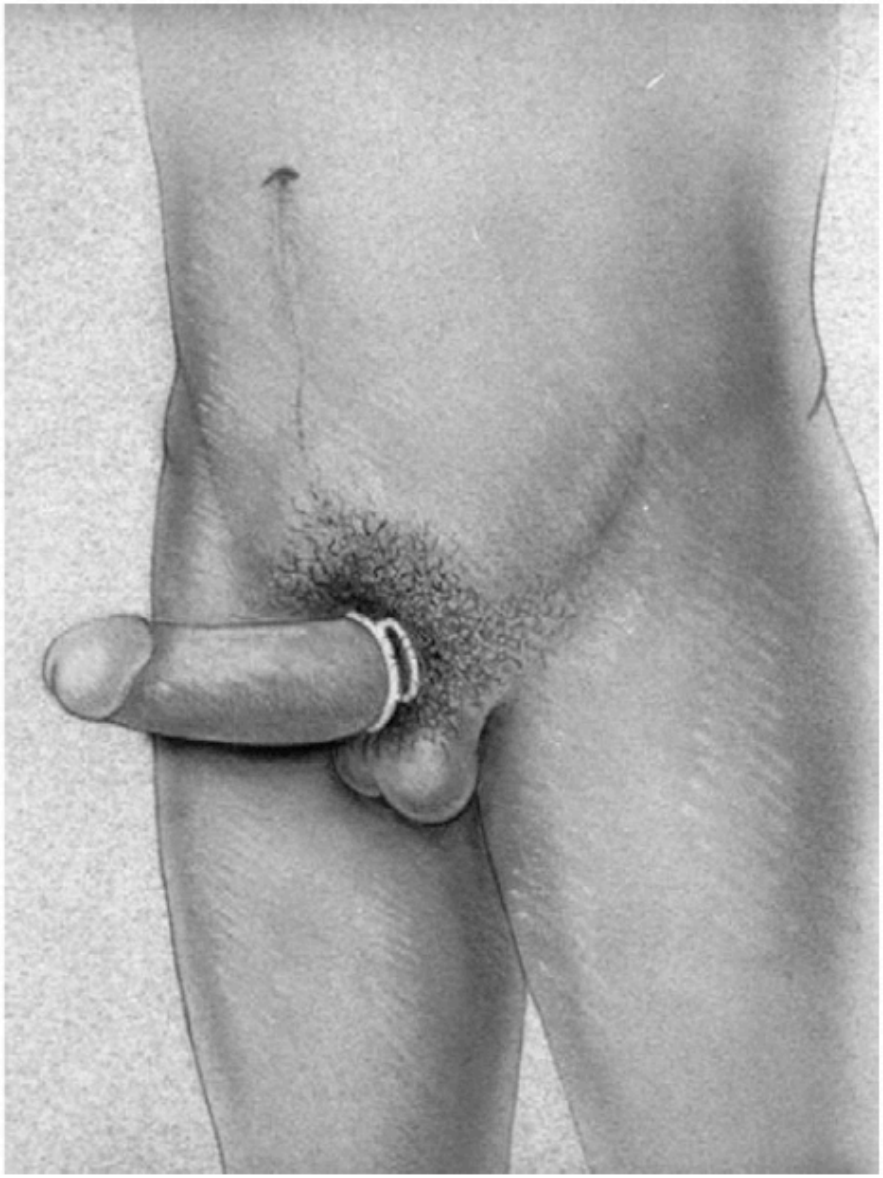

Vacuum erection device in treatment of organic erectile dysfunction and penile vascular differences between patients with DM type I and DM type II

The Aging Male Published online: 01 Oct 2016.

Bogdan Pajovic[1], Antonio Dimitrovski[2], Nikola Fatic[3], Milos Malidzan[4], and Marko Vukovic[4]

Table 1. Peak systolic velocity (PSV) and diameter of cavernous artery (DCA) before and after intracavernous injection (ICI) of alprostadil.

	PSV (cm/s)	DCA (cm)
Mean		
Group IDM type I	PSV (cm/s)	DCA (cm)
Initial	19.7 (2.4)	0.12 (0.03)
After ICI (5 min)	24.3 (3.4)*	0.16 (0.04)*
After ICI (20 min)	26.1 (3.1)*	0.19 (0.02)*
Group II DM type II		
Initial	34.1 (4.3)†	0.47 (0.07)†
After ICI (5 min)	36.7 (6.2)*	0.52 (0.13)†
After ICI (20 min)	38.2 (5.4)*,†	0.60 (0.09)*,†

Table 2. Peak systolic blood flow (PSV) estimation using color-duplex ultrasonography. Blood glucoses levels and HbA1C are evaluated too.

	Peak systolic velocity (cm/s)	Blood glucose levels	HbA1C (%)
Mean (SD)			
Group IDM type I	19.7 (2.7)	14.1 (3.7)	11.2 (3.1)
Group IIDM type II	34.1 (3.3)	9.15 (2.5)	8.3 (2.6)
p values	<0.01	<0.01	<0.05

Table 3. Changes in IIEF scores in both groups of patients, prior and six months after the treatment using vacuum devices.

	Erectile function (items 1–5, 15)	Intercourse satisfaction (items 6–8)	Orgasmic function (items 9 and 10)	Sexual desire (items 11 and 12)	Overall satisfaction (items 13 and 14)
Mean (SD)					
Group I DM type I					
Initial	8.8 (3.64)	5.36 (2.98)	5.4 (2.98)	8.6 (2.09)	3.23 (2.26)
Six months	14.77 (6.77)*	9.87 (2.53)*	5.80 (2.49)	9.22 (2.92)	7.87 (2.12)*
Group IIDM type II					
Initial	10.43 (2.99)	6.06 (3.34)	6.18 (2.99)	9.09 (1.04)	4.09 (2.34)
Six months	19.09 (6.32)*,†	10.61 (2.47)*	6.90 (1.70)	9.3 (0.94)	7.09 (1.92)*

Patients with DM type I had more serious risk for development of arteriogenic ED. VED could be a good alternative therapy for patients who denied oral therapy.

Combined sildenafil with vacuum erection device therapy in the management of diabetic men with erectile dysfunction after failure of first-line sildenafil monotherapy

International Journal of Urology (2014) 21, 1263–1267

Lu Sun,[1,3] Fang-Li Peng,[2] Zhi-Ling Yu,[1] Cai-Ling Liu[1] and Jun Chen[3]

Table 2 Comparison of various variables between two groups at baseline, 1-month and 3-month visits

Efficacy variables	VED group ($n = 30$)			Sildenafil plus VED group ($n = 30$)			*P*-value
	Baseline	1 month	3 months	Baseline	1 month	3 months	
Mean IIEF-5 score	11.36 ± 3.17	12.41 ± 2.63	14.29 ± 2.81	11.64 ± 2.96	14.86 ± 2.17*	17.53 ± 2.95*	<0.001
SEP-2 Successful penetration (%)	3 (10%)	9 (30%)	14 (46.6%)	3 (10%)	14 (43.7%)*	22 (73.3%)*	<0.001
SEP-3 Successful intercourse (%)	2 (6.6%)	8 (26.6%)	14 (46.6%)	3 (10%)	13 (43.3%)*	21 (70%)*	<0.001

P-value for mean change from baseline to endpoint, VED group versus sildenafil plus VED group. Treatment with sildenafil plus VED therapy significantly improved all domains of sexual functioning in EDDM patients (*$P < 0.001$).

Results: There were no significant differences in average patient age, duration of diabetes, duration of erectile dysfunction, baseline International Index of Erectile Function scores, hypertension, blood testosterone, smoking and alcohol consumption between two groups. Mean International Index of Erectile Function scores were significantly higher for group B at the 1-month (14.86 ± 2.17 *vs* 12.41 ± 2.63; $P < 0.0001$) and 3-months (17.53 ± 2.95 *vs* 14.29 ± 2.81; $P < 0.0001$) visits. Men in group B had better successful penetration (73.3% *vs* 46.6%) and successful intercourse (70% *vs* 46.6%) at 3 months compared with group A.

Conclusion: Combined use of sildenafil and vacuum erection device therapy significantly enhances erectile function, and it is well tolerated by diabetes mellitus patients not responding to first-line sildenafil alone.