



# ONE MONTH-TADALAFIL 5 MG ONCE DAILY ADMINISTRATION IMPROVES CLINICAL AND ULTRASOUND PARAMETERS OF CHRONIC PELVIC PAIN SYNDROME/LOWER URINARY TRACT SYMPTOMS



Lotti F.<sup>1</sup>, Corona G.<sup>1</sup>, Maggi M.<sup>1</sup>

<sup>1</sup>Sexual Medicine and Andrology Unit, Department of Experimental and Clinical Biomedical Sciences, University of Florence, Florence, Italy;

## Introduction.

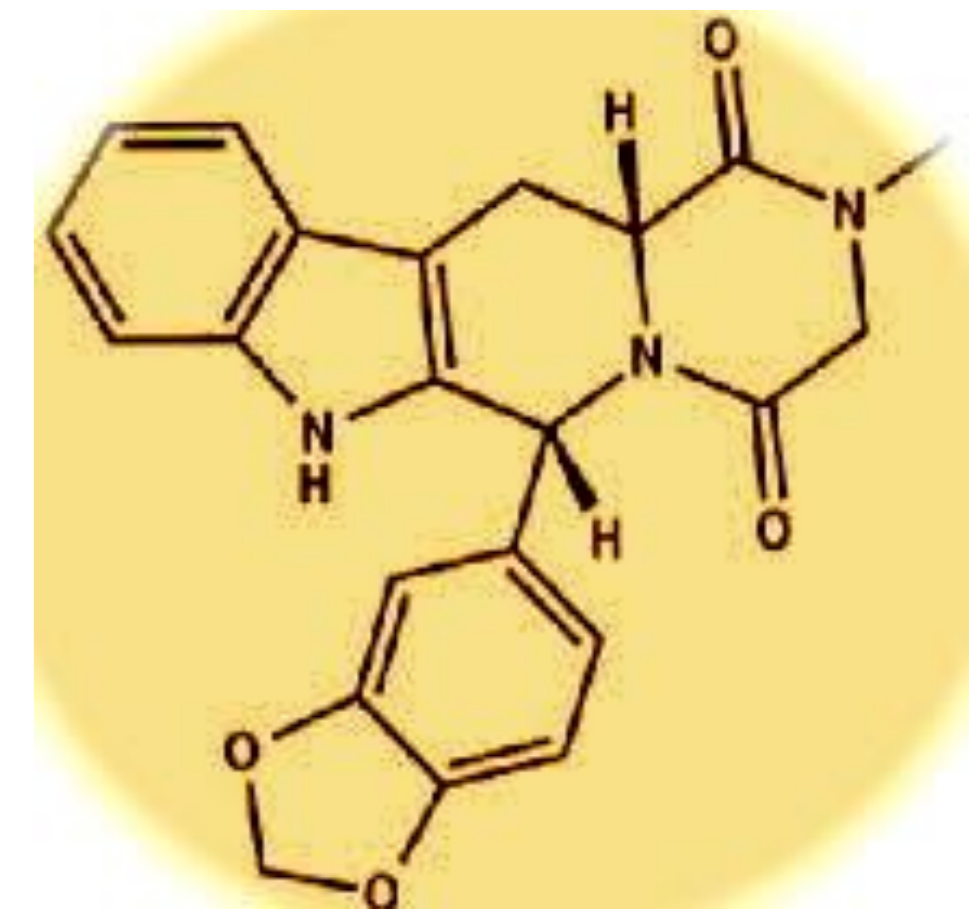
- Tadalafil 5 mg once daily (T5od) has been recently approved by the Food and Drug Administration for the treatment of lower urinary tract symptoms (LUTS), along with erectile dysfunction (ED).
- Recent pooled data analyses demonstrated that T5od-IPSS related improvements were significant regardless of confounders.
- PDE5 inhibitors exert a positive effect on ejaculatory latency.

We assessed the clinical outcome of 30 days-T5od administration on a patient complaining of CPPS/LUTS.

## Case report.

A Caucasian men of 27 years presented for chronic pelvic pain syndrome (CPPS) and LUTS. He has been complaining since one month of CPPS, LUTS, mild ED and acquired premature ejaculation. He underwent, before and after treatment:

- medical history assessment,
- complete physical examination,
- scrotal and transrectal color-Doppler ultrasound (CDUS), before and after ejaculation,
- semen analysis including seminal interleukin 8 (sIL-8) measurement,
- validated questionnaires exploring:
  - 1.CPPS (NIH-Chronic Prostatitis Symptom Index, NIH-CPSI),
  - 2.LUTS (International Prostate Symptom Score, IPSS),
  - 3.sexual and erectile function (IIEF-15; IIEF-15-erectile function domain),
  - 4.ejaculatory status (Premature Ejaculation Diagnostic Tool, PEDT),
  - 5.psychological symptoms (Middlesex Hospital Questionnaire).



Tadalafil

Clinical parameters	
Age	27
Body mass index (kg/m <sup>2</sup> )	24.2
Systolic/diastolic blood pressure (mmHg)	120/80
Smoking habit	Current smoker (5 cigarettes/day)
Alcohol assumption	Occasional
Physical activity	No
Total testosterone (nmol/L)	27.6
Current positive seminal and/or urine cultures	No bacteria
Mean testis volume (Prader) (ml)	23.5
Epididymal abnormalities	left head: palpable nodule/cyst
Prostate pain on palpation	yes

After treatment the patient showed an improvement in NIH-CPSI and IPSS scores.

Global sexual and erectile functions, assessed by IIEF-15 and IIEF-15-EFD, respectively, improved, as well as ejaculatory latency (see PEDT score).

Psychological status, assessed by MHQ, showed a consistent amelioration at the end of the treatment.

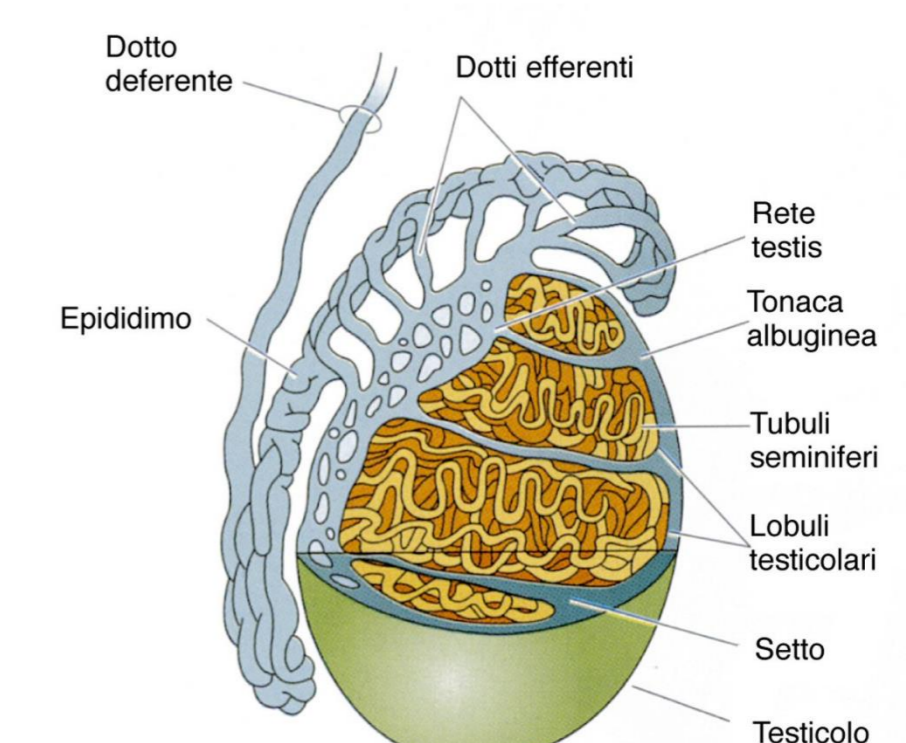
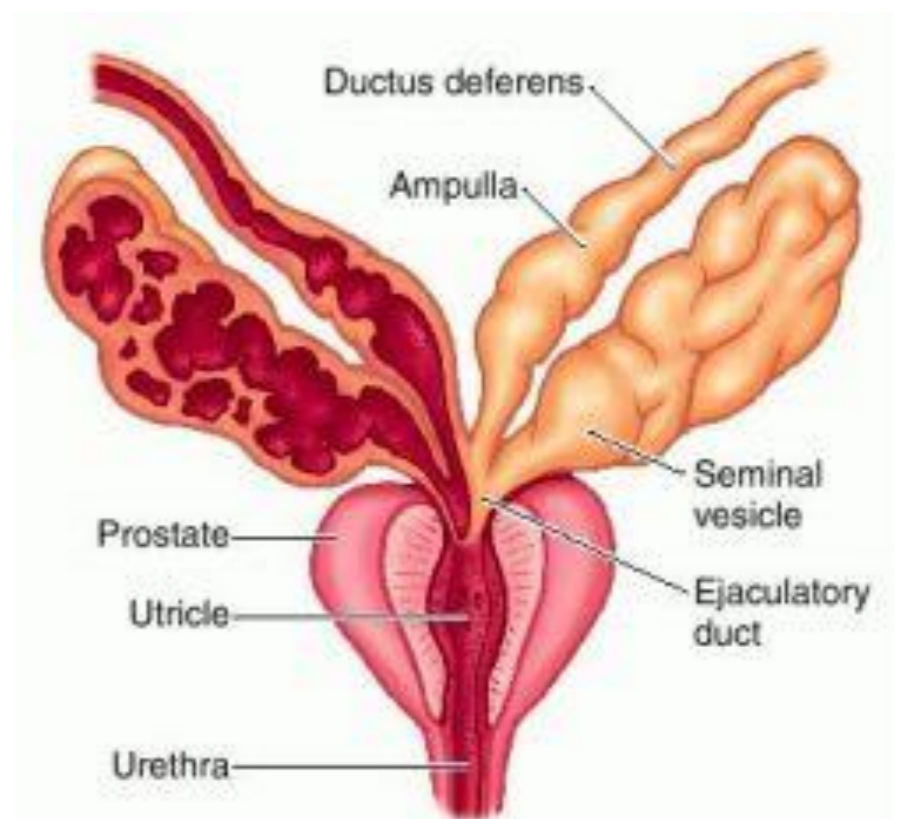
Questionnaires scores	Pre-Tadalafil	Post-Tadalafil
<b>Questionnaires score</b>		
NIH-CPSI (0-43)	22	17
-pain subdomain (0-21)	12	10
-void subdomain (0-10)	5	3
-quality of life subdomain (0-12)	5	4
IPSS (0-40)	23	14
IIEF-15 (5-75)	58	68
IIEF-15-erectile function domain (1-30)	24	27
PEDT (0-20)	14	11
MHQ (0-96)	19	7



We also observed an improvement in biochemical and CDUS parameters related to prostate-vesicular inflammation.

In particular, a reduction in sIL-8 levels and a significant improvement in arterial peak systolic velocity, parameters related to prostate inflammation and CPPS, were observed after treatment.

Color-Doppler ultrasound parameters and sIL-8 levels	Pre-Tadalafil	Post-Tadalafil
Prostate volume (ml)	30	27
Prostate echo-texture abnormalities	no	no
Prostate arterial peak systolic velocity (cm/s)	12.7	6.8
Prostate hyperaemia	yes	no
Seminal vesicles volume before ejaculation (ml)	36.78	30.86
Seminal vesicles volume after ejaculation (ml)	33.13	27.83
Seminal vesicles ejection fraction (%)	9.9	9.8
Seminal vesicles echo-texture abnormalities	yes	yes
Testis mean volume (ml)	16	16
Epididymal head (mm)	9.75	9.5
Epididymal tail (mm)	5.5	5.4
Epididymal echo-texture abnormalities	no	no
Epididymal hyperaemia	no	no
Varicocele	no	no
Seminal interleukin 8 (ng/ml)	8.15	6.14



## Conclusion.

A 30 days-T5od administration seems to exert an improvement in CPPS/LUTS, biochemical and CDUS parameters of prostate inflammation, along with psycho-sexual function.