

# **ESWT- Kliniske implikationer**

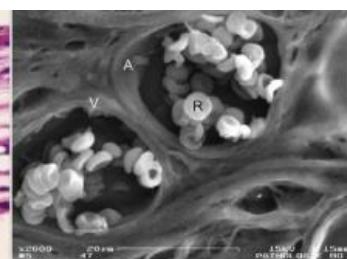
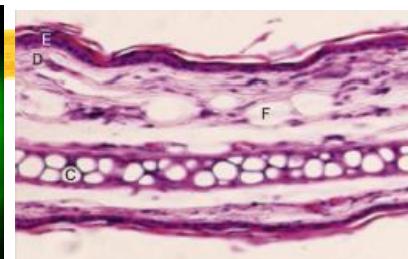
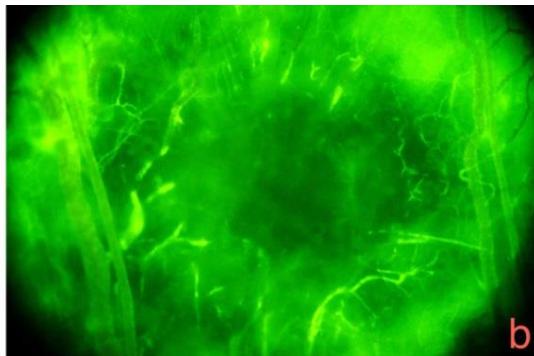
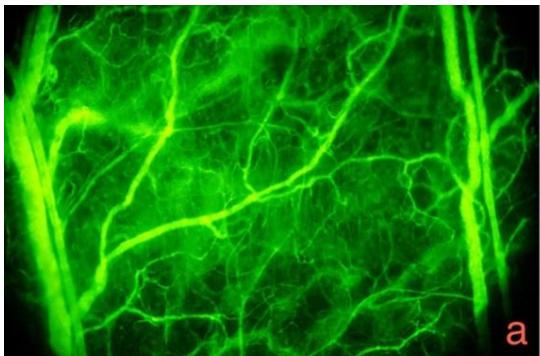


**Anvendelse af ESWT i urologien:**

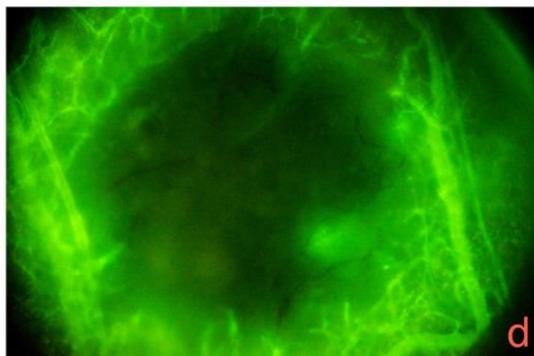
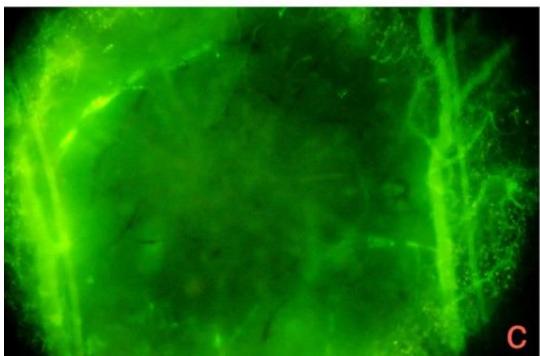
**Erektile dysfunktion**

**Peter Lyngdorf**

# Results of the Second Animal Study



Histology and electron microscopy



Stained non-perfused area as parameter for angiogenesis:

- a) before vascular dysfunction
- b) immediately after dysfunction as well as after
- c) first ESWT,
- d) second ESWT
- e) third ESWT
- f) after follow up within two weeks.

**Can Low-Intensity Extracorporeal Shockwave Therapy Improve Erectile Function? A 6-Month Follow-up Pilot Study in Patients with Organic Erectile Dysfunction.**

**Yoram Vardi et al.**  
***Eur Urol 2010;58:243.***

**Low-Intensity Extracorporeal Shock Wave Therapy—A Novel Effective Treatment for Erectile Dysfunction in Severe ED Patients Who Respond Poorly to PDE5 Inhibitor Therapy.**  
**Ilan Gruenwald, MD, Boaz Appel, MD, and Yoram Vardi, MD**  
***JSM 2012;9:259.***

**Does Low Intensity Extracorporeal Shock Wave Therapy Have a Physiological Effect on Erectile Function? Short-Term Results of a Randomized, Double-Blind, Sham Controlled Study**

**Yoram Vardi,\* ,† Boaz Appel, Amichai Kilchevsky and Ilan Gruenwald. *J Urol 2012;187:1769.***



# **ESWT- Kliniske implikationer**



**Er behandling med ESWT  
effektiv?**

**Energi kilde**

**Styrke**

**Antal behandlinger**

**Antal shocks pr. behandling**

**Frekvens**

# Treatment Experience – Long Protocol



*Data from single study, Denmark Dr. Lyngdorf; ISMST (2014)*

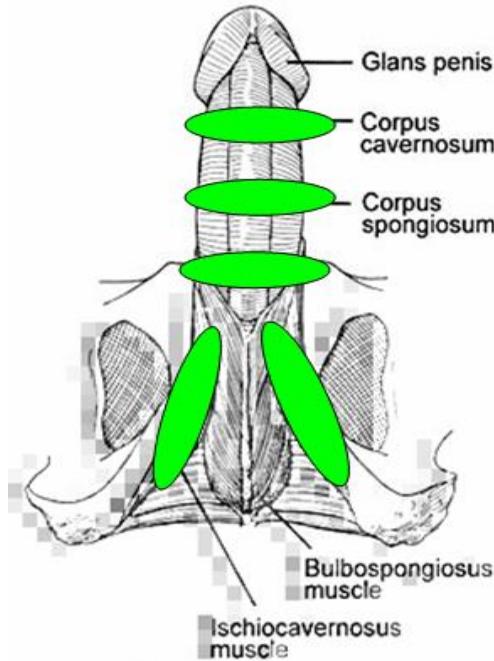


## *First Protocol (2010);*

### Methodology (Electrohydraulic System)



**Shaft**



**Crura**

**Apply 300 shocks at five locations across the shaft  
and crura a total of 1500 shocks per session (15 min).  
Use generous amount of coupling ultrasound gel.**

# **ESWT- Kliniske implikationer**



**Hvordan kommer vi videre?**

# **Nye spørgsmål**



**Virkningsmekanisme**

**Hvilken applikator?**

**Protokol:**

**Antal behandling**

**Antal shock pr. beh.**

**Energi**

# **ESWT- Kliniske implikationer**



**Antal shock pr. behandling: 2.000**

**Antal behandlinger: 6-12**

**Antal beh. pr. uge: 2**

**Energi: 0,08 – 0,11 mJ/mm<sup>2</sup>**

# **Nye spørgsmål**



**Hvad skal måles?**

**Parametre (IIEF, EHS etc.)**

**Udvælgelse af patienter**

**Forebyggende behandling**