

This rat model of cavernous nerve crush injury mimics neural damages associated with radical prostatectomy in human.

## Pathophysiological features

Identically to human, the rat model of cavernous nerve crush injury displays ED (figure 1).

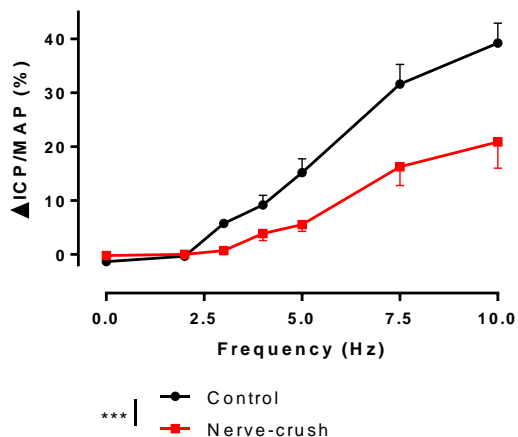


Figure 1: Effects of bilateral cavernous nerve crush injury (3 weeks post-surgery) on intracavernosal pressure (ICP) after ES CN in anesthetized rats (From Oudot et al, 2011).

Moreover, several pathophysiological mechanisms which are linked to radical prostatectomy-associated ED in human are present in rats with cavernous nerve crush injury:

- Penile nNOS immunoreactive fibers content decrease. (The brief activation of nNOS is involved in the initiation of the erectile process causing the increase in intracavernosal pressure).
- Cavernosal tissue remodeling and fibrosis.

### Related Pelvipharm bibliography:

Oudot A *et al.* **Eur Urol** (2011):60(5):1020-1026

Bessedde T *et al.* **J Sex Med** 5(s2) (ESSM 2008)

Bessedde T *et al.* **Eur Urol suppl** 7(3):161 (EAU 2008)

**NB: Pelvipharm will gladly study the feasibility to fit this experimental model to its client's needs.**