BOO induces many morphological and functional changes involving the bladder in patients. Reproducing such an outlet obstruction results in progressive changes developing overtime as the animal grows and becomes progressively more obstructed.

Pathophysiological features

- Morphological changes: smooth muscle hyperplasia and hypertrophy (histomorphometry)
- Functional changes: increased bladder capacity, residual volume, and micturition pressure in addition to the occurrence of detrusor overactivity characterized by non-voiding contractions
- In bladder outlet obstruction, bladder dysfunction is suggested to be closely associated with decreased regional bladder blood flow which is directly related to the degree of tissue oxygenation, and results in bladder hypoxia.

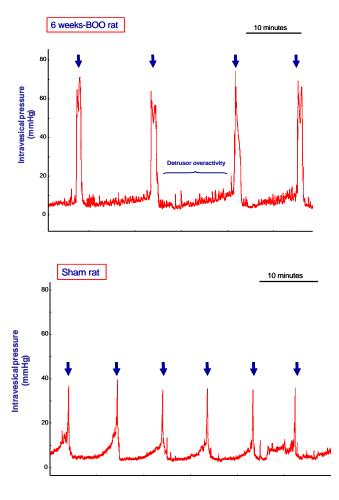


Figure 1: Representative cystometrograms in conscious 6 weeks BOO and sham rats. Arrows indicate the voiding contractions (Pelvipharm, internal data)

Related Pelvipharm bibliography:

Julia-Guilloteau V *et al.* **Eur Urol Abstract** (EAU, 2006):5(2):78 Oger S *et al.* Abstract (EAU, 2007) Oger S *et al.* Abstract (AUA, 2007)