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## O-FUN-12 - Thalamic deep brain stimulation and erectile dysfunction

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### Resumen

**Objectives:** Deep brain stimulation has been referred as useful in refractory neuropathic pain and thalamic ventroposterolateral nucleus is one of the most used target. One patient of our case series reported erectile dysfunction after surgery, considering thalamic stimulation as the cause. This paper aims to study if erectile dysfunction is a long-term side effect of thalamic deep stimulation.

**Material and methods:** We included 12 male patients submitted to surgery for treatment of intractable neuropathic chronic pain caused by brachial plexus avulsion or phantom limb pain. For evaluation of neuropathic chronic pain we used: VAS score, 36-Item Short-Form Health Survey, Brief Pain Inventory and University of Washington Neuropathic Pain Score before the surgical procedure and 2 years after and also the mean percentage of pain relief. For the assessment of erectile dysfunction the international index of erectile dysfunction (IIEF-5) validated for Portuguese language was used.

**Results:** 5 patients were classified as having erectile dysfunction: 1 referred that had no erectile dysfunction before surgery and that symptoms began 1 year after; another assumed that symptoms existed before but got worse after the surgery; the other 3 patients assumed that symptoms had no relation with the surgery. In these 5 cases other possible erectile dysfunction causes were excluded.

**Conclusions:** Ventroposterolateral thalamic stimulation induces consistent analgesia. Some studies have already highlighted the involvement of thalamus in penile erection. Our work tries to relate if thalamic stimulation for neuropathic pain treatment has any influence on male sexual function.