

## Combined Ultrasound and Nerve Stimulator Technique for Injecting the GFN in a Patient with CPIP

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Inguinal hernia repair is one of the commonly performed surgical procedures. But chronic postoperative inguinal pain (CPIP) is one of the major complications in patients with inguinal hernia repair. The quality of life in the patients with CPIP is very low due to inguinal pain. We report the treatment of CPIP after inguinal hernia repair using combined ultrasound and nerve stimulator technique for injection of genitofemoral nerve (GFN). A 59-year-old man was diagnosed with left inguinal hernia and performed Laparoscopic hernia repair - Totally extraperitoneal on February 20, 2017. The patient developed pain from the left inguinal area to the scrotum from the beginning of March, and then underwent conservative treatments, including ultrasound (US)-guided nerve block of ilioinguinal nerve (3 cycles) and GFN (1 cycle) block and medication, were performed in pain clinic but the pain persisted. But he suffered a sustained inguinal pain. Therefore, we used nerve stimulator to increase the accuracy of the neural approach. Scrotal contraction and paresthesia on the GFN distribution were confirmed by nerve stimulator after the approach of GFN with ultrasound. This procedure yielded symptom relief. In a follow-up of five-month, he was very satisfied with the treatment because he didn't have any pain and medication. Ultrasound nerve blocks are commonly performed, but the results may not be satisfactory. Nerve stimulator allows for selective nerve block and greatly enhances the technical ability to perform precise localization and injection. The use of combined ultrasound and nerve stimulator injection technique are an effective and non-invasive approach to treat CPIP.

### Acknowledgment

This research was supported by a grant from the Korea Health Technology R&D Project through the Korea Health Industry Development Institute, funded by the Ministry of Health & Welfare, Republic of Korea (grant number: HI15C1529).