Splanchnic nerve radiofrequency ablation for treating resistant abdominal pain

Sir,

We present a 50-year-old female patient with resistant abdominal pain for more than 2 years. The patient developed this pain after she undergone cholecystectomy. The patient initially undergone workup including images and laboratory work to exclude any abdominal condition. All her investigations were negative.

The patient tried several medications and procedures with no long-term pain relief. The patient used to visit the emergency room frequently due to severe abdominal pain. We decided to move forward with bilateral splanchnic nerve blocks with steroid injection. Block resulted in 80% improvement in her pain that lasted for 3 weeks. Because pain relief was short living, we discussed with patient performing a radiofrequency ablation (RFA) for the same nerves to provide longer term pain relief and the patient agreed.

Procedure: After obtaining an informed consent, the patient was placed in the supine position, and her back was prepped using standard sterile technique using full-body drapes. After infiltration of the skin with 1% lidocaine for local anesthesia, 20-gauge 145 mm with 10 mm active tip-curved RFA needles were advanced bilaterally to anterolateral aspect of T11 and T12 under fluoroscopic guidance. Sensory testing reproduced abdominal pain at 0.5–0.8 V at all sites. Thermal RFA was carried out at 80° for 90 s × 2 cycles with needle rotation to maximize lesion size.

The patient reported 50% reduction in her pain after RFA which continued for 5 months. Repeat RFA was performed after 5 months that provided 60% improvement in her pain.

RFA and pulsed radiofrequency (PRF) are effective in treating different painful conditions such as fascial pain using sphenopalatine ganglion or trigeminal RFA,[1] pain originating from somatic nerves and joints[2] as well as several other conditions.

It is very important to keep those uses in mind as RFA and PRF have become more popular for treating axial pain and joint pain while their uses can cover a much broader spectrum of other painful conditions.

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Nil.

Conflicts of interest

Dr. Abd-Elsayed is a consultant for Innocoll, Axsome, Medtronic, Halyard, SpineLoop and Ultimaxx health.

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References

1. Yin W. Sphenopalatine ganglion radiofrequency lesions in the treatment of facial pain. Tech Reg Anesth Pain Manag 2004;8:25-9.
2. Wilkes D, Ganceres N, Solanki D, Hayes M. Pulsed radiofrequency treatment of lower extremity phantom limb pain. Clin J Pain 2008;24:736-9.

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