

INTRODUCTION

- **Coccydynia:** Tailbone-mediated pain associated with radiation to the inferior sacral and perineal regions. The prevalence is unknown; and treatment can be difficult given the multifactorial etiology of coccygeal pain [1].
- **Conservative Management:** physical therapy, ergonomic adaptations, and nonsteroidal anti-inflammatory medications.
- **Current Interventional Options:** Steroid injections, nerve blocks, and spinal cord stimulators [2]. These procedures target the ganglion impar nerve bundle. Surgical intervention is regarded as a last resort; however, there exists a high complication rate and treatment failure [3].
- **Radiofrequency ablation (RFA):** A known technique used to ligate various nerves of the body. Targeting the ganglion impar region has been described in case series and small scale studies as a promising therapeutic modality for long term pain relief in regards to coccydynia.

CASE PRESENTATION

- 63-year-old male with chronic intractable cervical and coccyx pain secondary to progressive coccydynia.
- Conservative management included buttock/pressure relief devices providing limited relief as well as pregabalin 100mg twice daily with intermittent intermediate relief of symptoms.
- Over the span of 4 years, interventional management included:
 - 4 ganglion impar nerve blocks, which initially provided significant pain relief initially lasting more than 6 months; however, there was a decline in efficacy with his most recent one lasting less than a week.
 - A failed spinal cord stimulator trial for severe coccygeal pain.

RFA PROCEDURE DESCRIPTION

- With fluoroscopic guidance, a spinal needle was advanced through the sacral membrane of the ganglion impar region.
- Needle positioning was confirmed using radiopaque dye.
- Sensory stimulation was done at 50 Hz not exceeding 1.0 volts, and motor stimulation was done at 2 Hz not exceeding 3.0 volts.
- No abnormal sensory or motor stimulation was noted.
- Bupivacane was injected to anesthetize the medial branch nerve.
- The location was diathermized at 80°C for 150 seconds.
- Needle was flushed with lidocaine and removed.
- A Band aide was applied.
- 8 months status post procedure, the patient's pain was markedly reduced, and has not required follow up.

IMAGING

(A.)



(A.) Anterior- Posterior view of needle advancement to the ganglion impar region.
(B.) Lateral view confirming needle placement to the target region with contrast (Arrow)

(B.)



DISCUSSION

- RFA of the ganglion impar is offered typically when patients have failed multiple other treatments and evidence in the literature supports RFA as an affective long lasting analgesic technique [4].
- This case further supports the efficacy of radiofrequency ablation of the ganglion impar region as it pertains to coccydynia that is refractory to other treatments.

CONCLUSION

- This case provides an example demonstrating analgesic superiority of RFA and adds to the sparse body of literature to support the role of RFA in the coccydynia pain paradigm.

REFERENCES

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