

Background

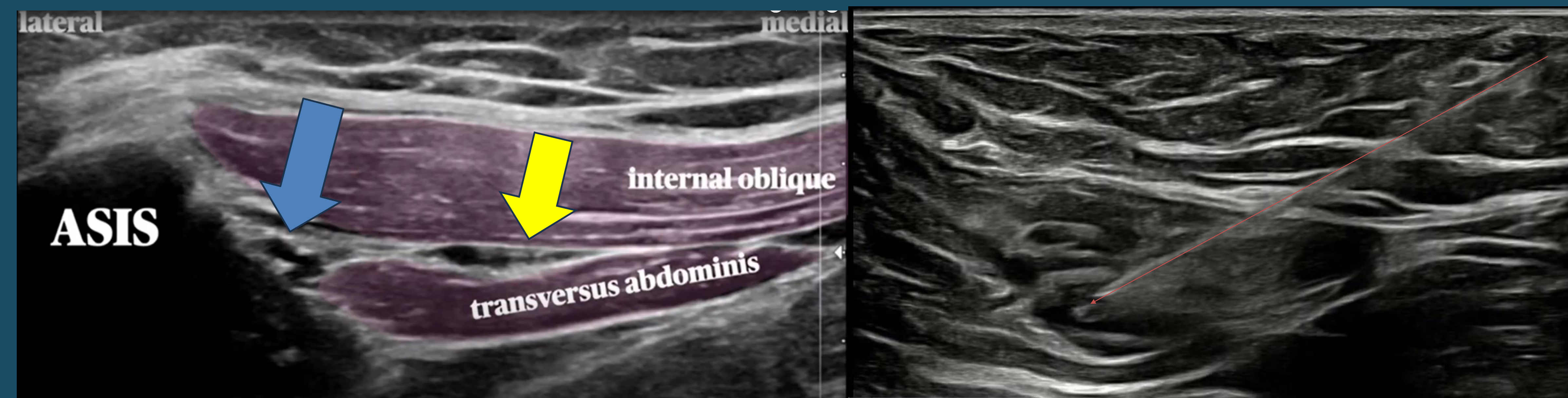
- Chronic inguinal nerve neuralgia, a rare and persistent condition, can result from lower abdominal surgeries like hernia repair, causing sharp pain along the inguinal area with radiation to the testicles (especially in males).
- Delayed diagnosis is common, and conservative treatments often prove ineffective.
- Radiofrequency ablation of the ilioinguinal/iliohypogastric nerve has shown promising results.
- Ultrasound, a versatile tool, enables precise nerve identification and real-time needle placement confirmation.

Case Presentation

- **88-year-old male** with chronic right groin pain post-inguinal hernia surgery in 2014.
- Pain described as sharp, radiating to right testicle, easily reproduced by palpation in right lower abdomen (positive Carnett sign).
- **High BMI of 41.**
- **Previous unsuccessful attempt at ilioinguinal and iliohypogastric nerve radiofrequency ablation under fluoroscopy.**
- Gabapentin and amitriptyline tried but poorly tolerated due to drowsiness and side effects.
- Pain escalated, limiting sitting to 5 minutes, daily pain rating 7 to 10.
- Significant improvement noted with ultrasound-guided ilioinguinal nerve block trials.
- Followed by ultrasound and fluoroscopy-guided radiofrequency ablation targeting the ilioinguinal nerve.
- At 6-week follow-up, patient reported complete pain relief and improved daily function.

Conclusion

it is highly recommended to utilize **ULTRASOUND GUIDANCE** for the **ilioinguinal/iliohypogastric nerve** when performing *radiofrequency ablation*, particularly in **elderly** or **obese** patients



The UTRGV IRB has determined this case report as “not research”
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Discussion

- Ilioinguinal and iliohypogastric nerves are prone to injury during abdominal surgeries like hernia repair due to their superficial location.
- These nerves travel **between the transverse abdominis and internal oblique muscles**
- Ilioinguinal/iliohypogastric nerve blocks are effective
- Radiofrequency ablation is recommended for chronic cases.
- Traditional methods use fluoroscopy or CT for needle guidance, relying on well-established anatomical landmarks.
- Needle insertion point: 2 cm medial and 2 cm superior to the anterior superior iliac spine, advancing until a second pop signifies penetration into the transverse abdominis plane.**
- In elderly or obese patients, locating the nerve with CT or fluoroscopy alone can be challenging.
- Precise needle depth is crucial due to the nerve's location **between transverse abdominis and internal oblique muscles.**
- Ultrasound has gained popularity for these nerve blocks, providing real-time visualization and reducing radiation exposure.**

References

1. Kastler A, Aubry S, Piccand V, Hadjidekov G, Tiberghien F, Kastler B. Radiofrequency neurolysis versus local nerve infiltration in 42 patients with refractory chronic inguinal neuralgia. Pain physician. 2012;15(3):237-244.
2. Chernishof V, Wong J, Kim E. Ilioinguinal/iliohypogastric pulsed radiofrequency for the treatment of pediatric chronic abdominal pain: A case report. A&A Case Reports. 2021;15(2):e01393.
3. Miccio J, Vincent F, Navlani R, Bonder JH, Singh JR. Fluoroscopically-guided pulsed radiofrequency neurotomy technique for the treatment of genitofemoral neuralgia. Pain physician. 2016;19(7):E1099-E1101.
4. Demirci A, Efe EM, Türker G, et al. Iliohypogastric/ilioinguinal nerve block in inguinal hernia repair for postoperative pain management: Comparison of the anatomical landmark and ultrasound guided techniques. Brazilian journal of anesthesiology (Elsevier). 2014;64(5):350-356.
5. Trainor D, Moeschler S, Pingree M, et al. Landmark-based versus ultrasound-guided ilioinguinal/iliohypogastric nerve blocks in the treatment of chronic postherniorrhaphy groin pain: A retrospective study. Journal of Pain Research. 2015;8(default):767-770.

22nd Annual Pain Medicine Meeting

November 10-11, 2023 | #ASRAfall23

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