

INTRODUCTION

- Celiac plexus neurolysis (CPN) is less commonly employed for persistent noncancerous visceral organ pain
- Possible intraoperative complications of CPN include pneumothorax, hypotension, and intravascular injection
- Local Anesthetic Systemic Toxicity (LAST) is an acute and life-threatening complication of local-anesthetic administration
- There is a known correlation between anesthesia exposure and spells of functional neurologic deficits (FND) [2,3]

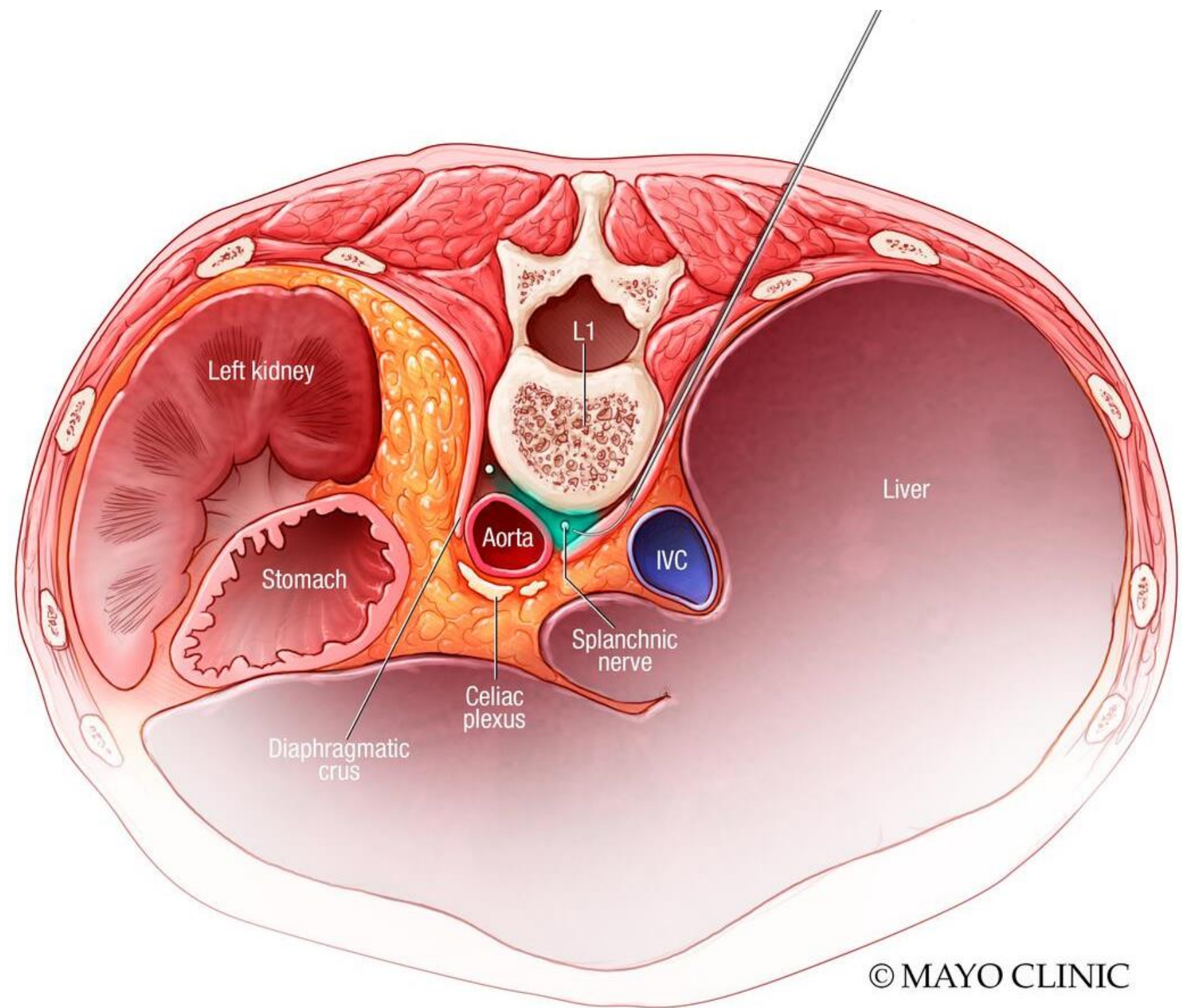


Figure 1: Retrocrural approach to CPN

CASE REPORT

- A 23-year-old female undergoing CPN for chronic flank pain secondary to recurring pyelonephritis
- History of migraine headaches, sexual abuse, and anorexia nervosa
- Previous celiac plexus block provided 90% pain reduction for 3 months.
- Moderate sedation achieved with midazolam and fentanyl
- Bilateral Retrocrural approach to L1 vertebral body
- Digital subtraction angiography confirmed non-vascular spread of contrast
- 16 mL 0.5% Bupivacaine with epinephrine and 4 mL 2% Lidocaine was injected at an increment of 2mL/min without change in vitals
- Moments later, patient complains of increasing abdominal pain followed by sudden tonic-clonic motion of extremities
- Repeated abortive doses of diazepam administered
- Intubated and admitted to ICU
- More detailed medical history obtained in ICU revealing undocumented PNES
- Subsequent episodes with non-epileptiform EEG correlate and complete recall of spells

DISCUSSION

Initial LAST Treatment Checklist [1]
Call for Help
Call for LAST Rescue Kit
Consider early initiation of intralipid
Consider Cardiopulmonary Bypass Team



Figures 2 and 3: Bilateral digital subtraction angiography confirming nonvascular spread of contrast

- The Celiac Plexus accepts autonomic and sensory afferent nerve fibers from various visceral organs including kidneys
- Less frequently employed for chronic non-malignant pain of other organs likely related to worse efficacy in treating chronic pancreatitis compared to pancreatic cancer pain [4]
- Anesthesia induces “vulnerable” state
- Periprocedural FND spells are associated with a dramatic increase in unanticipated hospitalization (53%) and ICU (25%) admission [2]
- Most commonly presents immediately on induction or emergence [3]
- >50% of patients have a history of FND spells [2,3]

Risk Factors of FND Spells After Anesthesia [2,3]

Female Sex
Eating Disorder
History of Trauma
Migraine Headaches
History of FND spells

SUMMARY

- LAST is a serious and deadly disease must be treated emergently after administering large doses of local despite history of PNES
- FND spells are commonly triggered by sedation and anesthesia and providers must be vigilant for risk factors and awareness of history of PNES
- CPN theoretically improves symptoms in patients with non-cancerous renal pain

REFERENCES

- Neal et. Al. *American Society of Regional Anesthesia and Pain Medicine Local Anesthetic Systemic Toxicity checklist: 2020 version*;46:81–82
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- Huepe-Artigas, D., et al., *Anaesthesia and the development of functional neurological disorder: A systematic review and case series*. General Hospital Psychiatry, 2022. **78**: p. 72-79.
- Cornman-Homonoff, J., et al., *Celiac Plexus Block and Neurolysis in the Management of Chronic Upper Abdominal Pain*. (0739-9529 (Print)).