

Extravasation of vasopressors from a central venous catheter: a rare but serious complication

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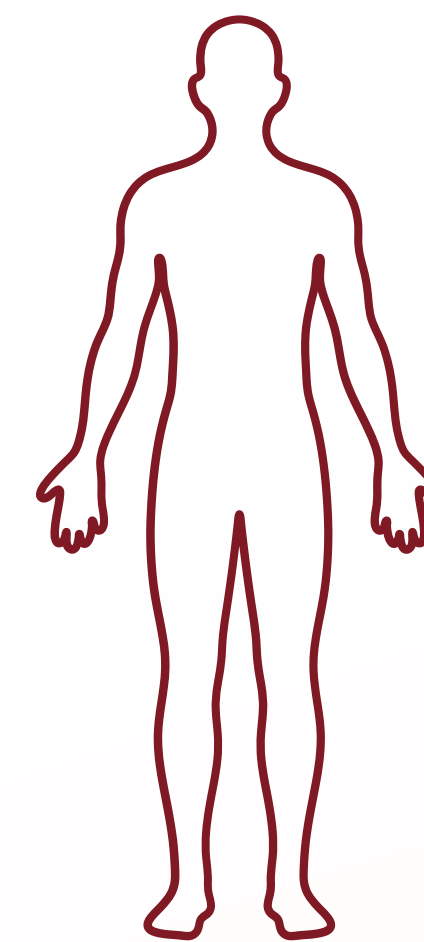
BACKGROUND

Extravasation of vasopressors from central venous catheters (CVCs), although rarely reported, may lead to **severe tissue necrosis** and **prolonged wound management**.

CASE REPORT

A 46-year-old male presented with:

- severe acute necrotizing pancreatitis
- respiratory failure
- abdominal compartment syndrome
- acute kidney injury
- circulatory instability



CENTRAL VENOUS ACCESS

- **CVC- right internal jugular vein (RIJV)** continuous renal replacement therapy (CRRT)
- **CVC- left internal jugular vein (LIJV)** - norepinephrine infusion (0.1–0.28 µg/kg/min)

COMPLICATIONS

Day 5th post-insertion of CVC in LIJV:

- **catheter dysfunction** - impaired aspiration and infusion- confirmed with ultrasound
- **4×6 cm hematoma**
- **skin necrosis** at left supraclavicular region
- suspected **vasopressor extravasation**

Fig. 1 Skin necrosis (left supraclavicular region) due to vasopressor extravasation from CVC.



MANAGEMENT

- **Removal** of LIJV catheter and placement of **new CVC** in right femoral vein
- Prolonged **local wound care**
- Multiple **antibiotic therapies** (secondary infection)
- **Surgical debridement + VAC therapy** initiated

OUTCOME

After treatment gradual **wound healing with granulation and epithelialization** was achieved, and the patient was **discharged home 72 days after the initial detection of necrosis**, without further complications

Fig. 2 Granulation formation, and epithelialization of the wound.



CONCLUSIONS

The case emphasizes the need for:

- meticulous **catheter site monitoring**
- **early recognition** of catheter dysfunction
- **prompt removal** and reinsertion at an alternative site

Increased awareness is essential to **improve vascular access safety and prevent extensive tissue injury**

References

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