

# When Treatment Turns Trauma: A Rare but Debilitating Complication of Sclerotherapy

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## Introduction

- **Sclerotherapy** is a widely used treatment for varicose veins, involving injection of sclerosants to induce fibrosis and vessel closure.
- Though generally safe, **serious complications like skin necrosis** are rare but potentially disfiguring.
- Necrosis is typically due to **extravasation**, inadvertent **arteriolar injection**, or **veno-arterial reflux**.
- Early identification and intervention are crucial to prevent long-term damage

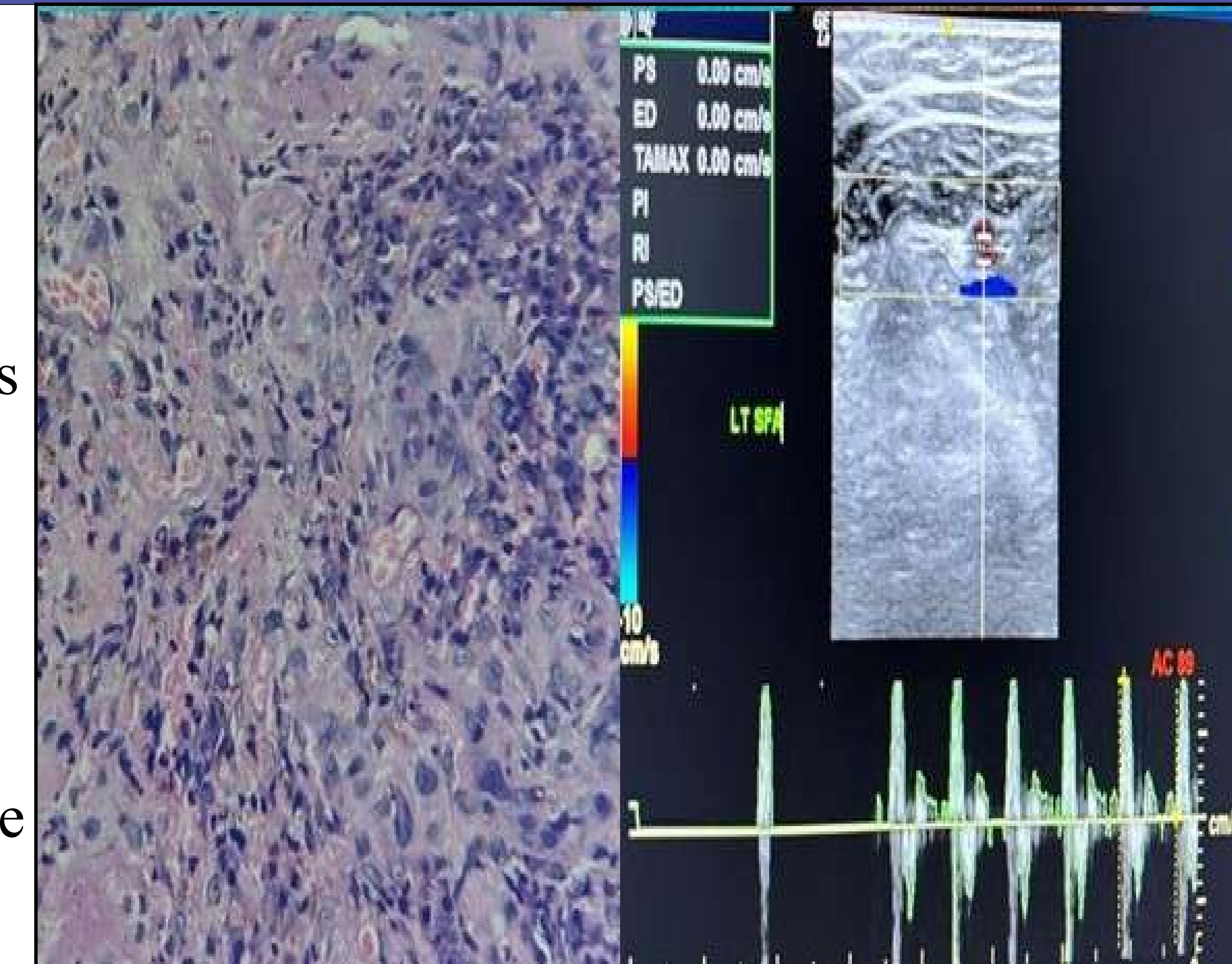
## Case Report

- A 29-year-old male farmer presented with a **non-healing ulcer and discharge over the left leg** for 3 months.
- He had a **2-year history of varicose veins**, primarily symptomatic in the left leg.
- He underwent **ultrasound-guided sclerotherapy** using **sodium tetradecyl sulfate**., 15 days post-procedure, he developed **localized hyperpigmentation**, progressing to **ulceration** at the injection site.
- **General examination**: unremarkable
- **Cutaneous examination**: A **2×2 cm round to oval ulcer**, 0.4 cm deep, with **regular margins**, yellowish **serosanguinous discharge**, and **surrounding hyperpigmentation** over the left medial leg
- **Dilated superficial veins with diffuse hyperpigmentation** on bilateral legs.



- **Investigations**: CBC, LFT, RFT: Normal
- Coagulation panel: Normal
- Autoimmune panel: Negative
- USG Doppler: All venous channels patent
- **Punch biopsy**: Stasis dermatitis hyperkeratosis, neutrophilic aggregates, fibrinoid necrosis, hemosiderin-laden macrophages, extravasated RBCs, vascular damage
- Treatment : Pentoxifylline, iv steroids

**Final diagnosis** : Sclerotherapy induced ulcer with stasis dermatitis



## Discussion

- Skin necrosis is an uncommon but serious complication of sclerotherapy, often linked to **improper injection technique**, **vessel anatomy**, or **sclerosant concentration**.
- In this case, the ulcer likely resulted from **chemical extravasation** or **inadvertent arteriolar injection**. Histopathology confirmed **stasis dermatitis** with vascular injury.
- Early treatment with **anticoagulants and steroids** may limit damage, but **delayed presentation**, as in this case, led to poor response.
- This highlights the importance of **skilled technique**, **pre-procedural counseling**, and **early recognition of complications** for optimal outcomes.