

The logo for LING, featuring the letters 'LING' in a white, sans-serif font. The letters are positioned over a stylized graphic of three curved, overlapping brushstrokes in dark blue, red, and yellow. The background of the slide is a light blue gradient with large, faint, curved brushstrokes in a darker shade of blue.

LING

Endovascular repair of iliac vein laceration associated with complex pelvic fracture

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INTRODUCTION

- **Iliac vein injury (IVI):**
 - Uncommon (<0.7% vascular trauma).
 - Life-threatening condition (25-80% mortality).

- **IVI associated to complex pelvic fracture:**
 - High intensity pelvic trauma.
 - Hemodynamic instability.

INTRODUCTION

- **Iliac vessel injuries w/blunt trauma:**
 - Pelvic fracture in 82.7% of cases.
- **Emergency management.**
- **Optimum treatment and diagnosis strategy:**
 - No consensus.

CASE DESCRIPTION

- 15-year-old **obese** male.
- Severe polytrauma (motorcycle accident).
- Glasgow coma scale score of 6.
- Hemodynamically instable: 41/25 mmHg BP, 150 bpm.
- Hemoglobin level of 7.5 g/dl.



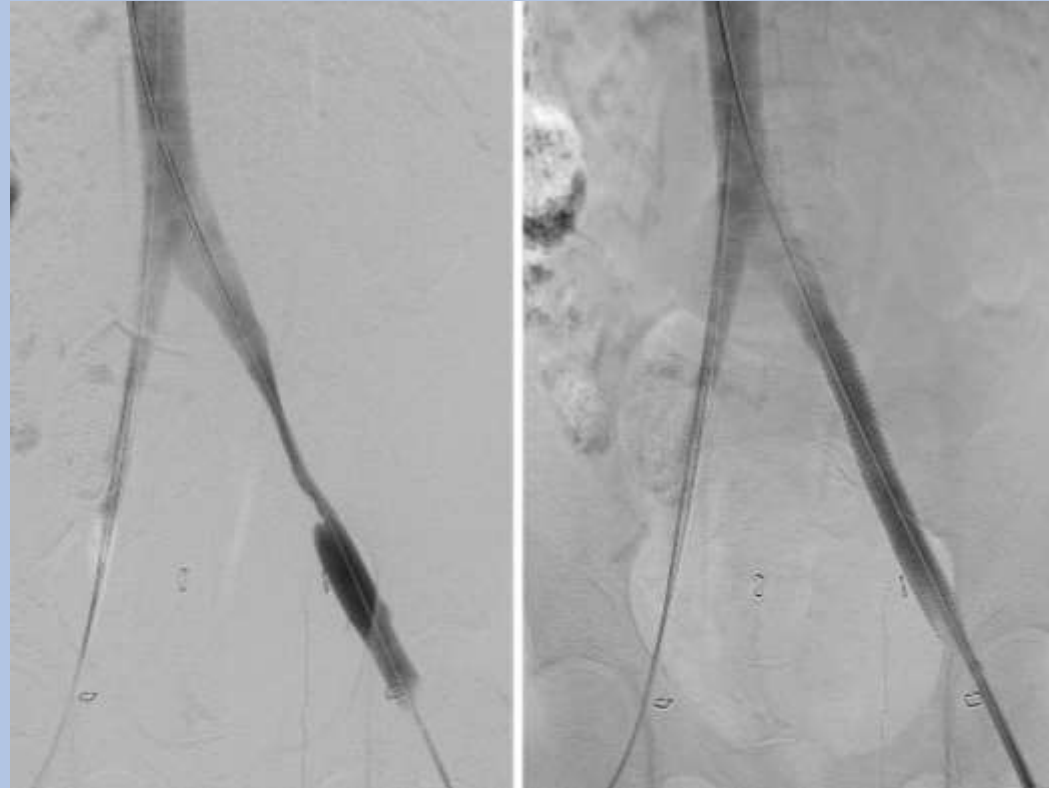
CASE DESCRIPTION

- Endovenous contrast enhanced full body CT.
- Laceration of the left external iliac vein with active bleeding and retroperitoneal hematoma.



CASE DESCRIPTION

- DUS guided percutaneous access of both common femoral veins.
- Phlebography.
- **13x100 mm Viabahn®.**
- Pelvic fracture fixed.



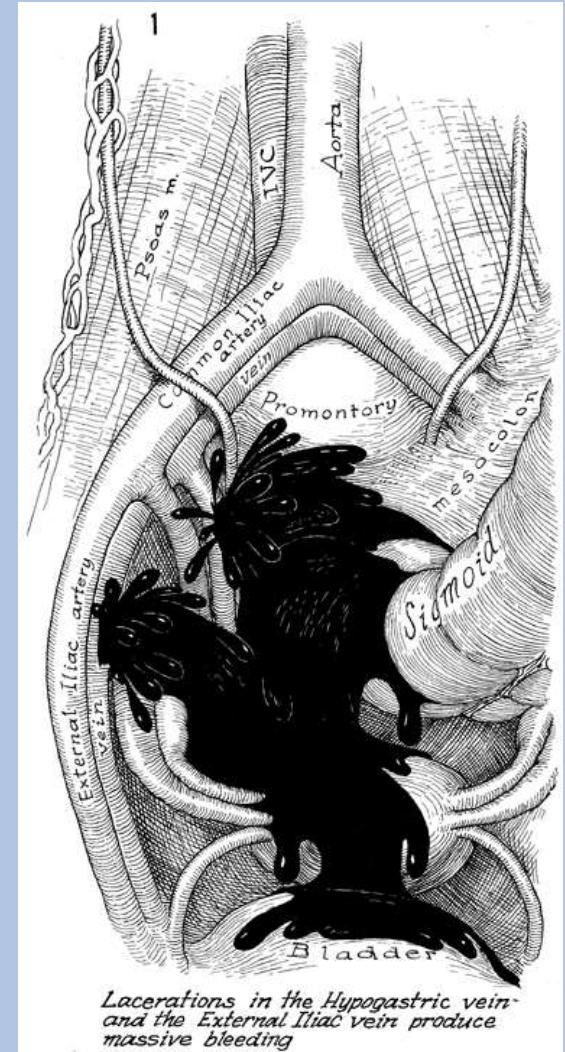
RESULTS

- 12 month follow-up:
asymptomatic and stent patency confirmed.



DISCUSSION

- Time is a key factor for survival.
- Difficult to diagnose.
- No consensus about the best therapeutic strategy.
- Effective bleeding control takes preference over fracture fixation.



DISCUSSION

- **Open repair**

- ❖ Laparotomy reduces the tamponade effect.
- ❖ Complex vessel exposure (iatrogenic injury).
- ❖ Thromboembolic complications.

- **Endovascular repair**

- ❖ Immediate sealing while keeping the retroperitoneal tamponade effect.
- ❖ Viabahn[®]: flexible and adaptable.



CONCLUSION

Self-expanding covered stent graft placement can be an effective and rapid treatment for life-threatening iliac vein injury.

... thank you.



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