

Fundación Cardioinfantil – LaCardio | January 2020 – June 2025 | Bogotá, Colombia

Vascular Access Program Team · Fundación Cardioinfantil LaCardio



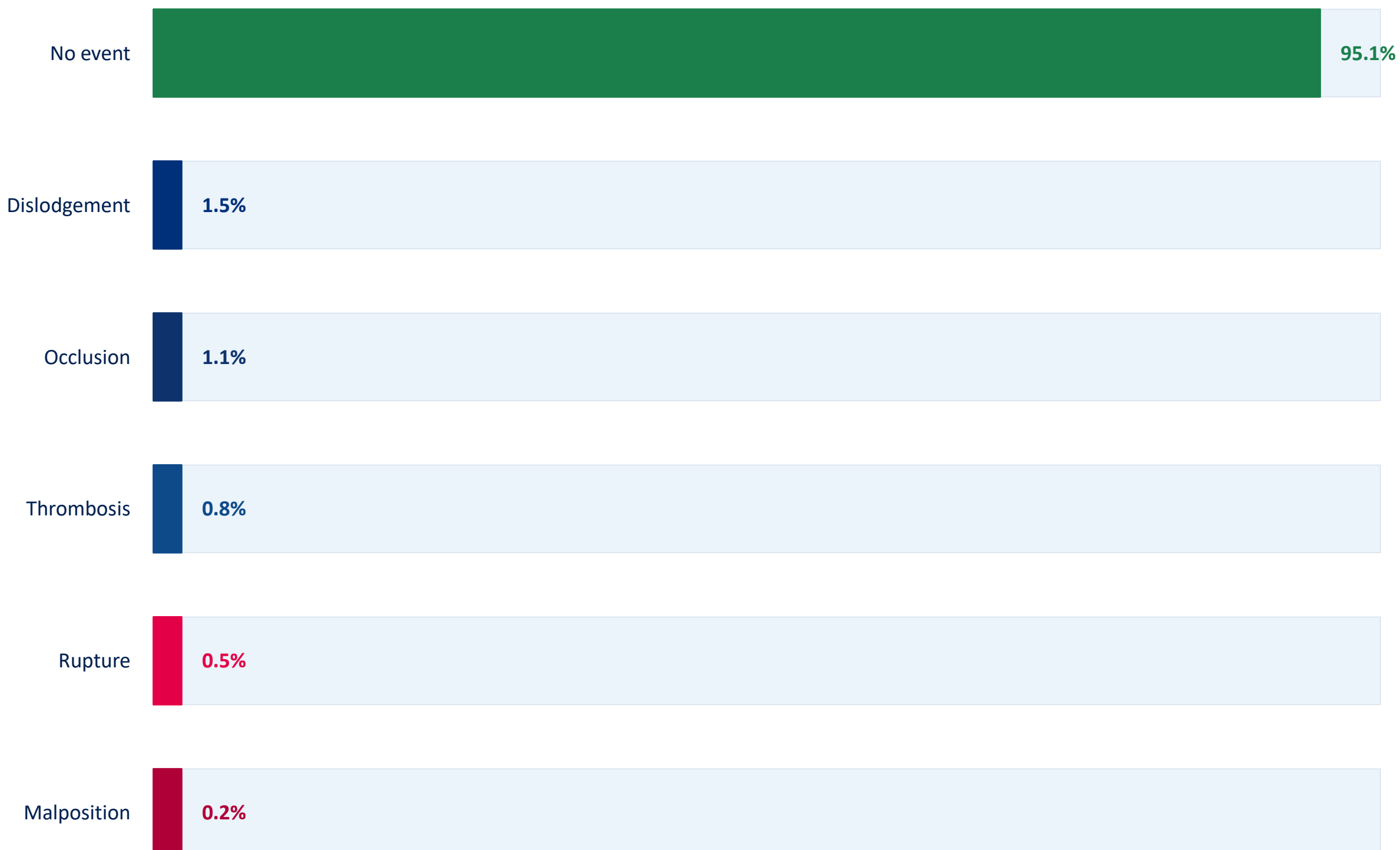
Vascular access devices (VADs) are essential for intravenous therapy. Inappropriate selection and repeated attempts increase the risk of:

- Interdisciplinary vascular access programs standardize care, optimize device selection, and improve patient safety across all acuity levels.*

To describe the clinical outcomes of an interdisciplinary Vascular Access Program at a quaternary referral hospital in Colombia, from January 2020 to June 2025.

Outcomes: first-attempt success, unsuccessful insertions, referrals, planned device removal, mechanical complications, CABSIs rates per 1,000 catheter-days.

6,412 patients • 8,788 assessments • 7,259 insertions • 100% ultrasound-guided



First insertion · n = 6,412 unique patients

CABSI rate: 0.6 / 1,000 catheter-days
Non-infectious complications: 1.6 / 1,000 catheter-days

*2025: Jan-Jun only · Bars = insertions (n) · Line = CABS/1,000 catheter-days

- 1 A structured interdisciplinary Vascular Access Program achieves consistently high first-attempt success (92%) and full ultrasound-guided coverage (100%).
- 2 Mechanical complications are uncommon (4.9%), reflecting protocol-driven care and expert ultrasound guidance throughout the study period.
- 3 CABS rates (0.6/1,000 catheter-days) are below national and international benchmarks, demonstrating the patient safety impact of this model.
- 4 Timely planned removal (94%) reduces infection risk and unnecessary catheter dwell time, a critical pillar of vascular access stewardship.
- 5 This model is a scalable, evidence-based approach applicable to high-complexity hospital settings seeking to optimize vascular access safety.

1. Gorski LA, et al. Infusion Therapy Standards of Practice. *J Infus Nurs.* 2021;44(1S):S1–224.
2. Chopra V, et al. Michigan Appropriateness Guide for IV Catheters (MAGIC). *Ann Intern Med.* 2015.
3. Lamperti M, et al. Evidence-based recommendations on ultrasound-guided vascular access. *Intensive Care Med.* 2020.
4. Alexandrou E, et al. International prevalence of peripheral IV catheter use. *J Hosp Med.* 2015;10(8):530–533.
5. Mermel LA. Short-term peripheral venous catheter bloodstream infections. *Clin Infect Dis.* 2017.
6. Sharp R, et al. Real costs of peripheral IV catheter-related complications. *J Infus Nurs.* 2014.