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Purpose: Calcified infrapopliteal intervention in chronic limb-threatening ischemia is constrained by small caliber, diffuse disease, and reduced compliance. Balloon angioplasty, specialty balloons, atherectomy, intravascular lithotripsy (IVL), and stents are available, but lesion-specific sequencing remains incompletely standardized. This exhibit presents a morphology- and response-based framework for treatment.

Materials and Methods: Guidelines, randomized trials, and network meta-analyses of calcified infrapopliteal revascularization were reviewed. This synthesis adapts the Giannopoulos infrapopliteal angioplasty algorithm and extrapolates device-morphology logic from the Korosoglou femoropopliteal Delphi consensus. Thresholds are operational; ≤50% residual stenosis reflects the DISRUPT PAD BTK II procedural-success definition, not a validated threshold.

Results: The framework treats intervention as an iterative vessel-response sequence.

1. **Characterize the lesion.** Define calcium depth, arc, length, nodularity, and wire position; subintimal wire position may limit atherectomy suitability.
2. **Test the vessel.** Use low-pressure, prolonged inflation with an appropriately sized long balloon as a diagnostic maneuver.
3. **Branch on the response.** Adequate expansion with preserved flow permits definitive therapy, including drug delivery. Persistent waist or recoil with deep/circumferential calcium may favor IVL. In selected non-dilatable lesions with intraluminal wire position, atherectomy may be considered, although not fully validated in the infrapopliteal segment; focal resistance favors a specialty balloon. Manage non-flow-limiting dissection with prolonged inflation rather than reflex stenting.
4. **Treat the expanded lumen.** DCB and DES may improve patency and reintervention outcomes versus plain balloon angioplasty; atherectomy evidence remains less consistent.
5. **Reserve scaffolding.** Provisional stenting may be considered for flow-limiting dissection, persistent recoil, or unacceptable residual stenosis.

Calcium-specific evidence remains limited; plain balloon angioplasty is the below-the-knee standard, drug therapies are evolving, and routine atherectomy has not shown consistent superiority.

Conclusion: Plaque morphology and response to first inflation, not device preference, should guide sequencing. This exhibit addresses this gap with a practical, cost-aware framework for treatment sequencing.

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