PURPOSE: To report a systematic review of the literature published on the outcomes of stenting for below-the-knee disease in patients with critical limb ischemia (CLI).

METHODS: Potentially relevant studies of stent implantation in the infragenicular arteries in \( \geq 5 \) patients with \( \geq 1 \)-month follow-up were systematically sought in BioMedCentral, ClinicalTrials.gov, The Cochrane Collaboration Register of Controlled Trials (CENTRAL), Google Scholar, and PubMed. Data were abstracted and pooled with a random-effect model to generate risk estimates with 95% confidence intervals (CI). Interaction tests were performed to compare different stent types. A risk of bias assessment was conducted separately, as were appraisals for small study bias, statistical heterogeneity, and inconsistency. RESULTS: Eighteen nonrandomized studies were retrieved comprising 640 patients. After a median follow-up of 12 months, binary in-stent restenosis occurred in 25.7% (95% CI 11.6% to 40.0%), primary patency in 78.9% (95% CI 71.8% to 86.0%), improvement in Rutherford class in 91.3% (95% CI 85.5% to 97.1%), target vessel revascularization in 10.1% (95% CI 6.2% to 13.9%), and limb salvage in 96.4% (95% CI 94.7% to 98.1%).
Head-to-head comparisons showed that sirolimus-eluting stents were superior to balloon-expandable bare metal stents in preventing restenosis and increasing primary patency (both p<0.001); sirolimus-eluting stents were also better than paclitaxel-eluting stents in terms of primary patency (p<0.001) and repeat revascularizations (p = 0.014). CONCLUSION: Percutaneous infragenicular stent implantation after failed or unsuccessful balloon angioplasty is associated with favorable clinical results in patients with CLI. Notwithstanding limitations of primary studies, sirolimus-eluting stents appear superior to bare metal and paclitaxel-eluting stents in terms of angiographic and/or clinical outcomes.

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