

Coronary Connector Devices: Analysis of 1,469 Anastomoses in 1,216 Patients

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Automated coronary anastomotic devices could be the key to limited or port access procedures. To evaluate their clinical performance to date, 33 studies that included systematic elective angiographic imaging were reviewed, reporting on five proximal and seven distal devices. Marked outcome differences between the technologies were uncorrelated to study type and demographic, operative, and follow-up variables. Significant issues included graft thrombosis, graft kinking, and stenosing intimal hyperplasia inside the connector, limiting clinical applicability of at least three devices. Substantial equivalence to 1-year conventional anastomotic patency standards was found for selected anastomotic devices, which holds the promise of expanded applicability.

(Ann Thorac Surg 2008;85:1828 –36)

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