Sutureless proximal anastomosis using the PAS-Port system: six-month patency and five-year follow-up in "all-comers".


Abstract

BACKGROUND:
The PAS-Port system (Cardica, Inc, Redwood City, CA) was used routinely for patients undergoing coronary surgery with at least one venous graft. Graft patency and clinical results were evaluated, respectively, at 6 months and 5 years after surgery.

METHODS:
A total of 100 patients (82 males, 18 females; mean age 68.9 ± 12 years) underwent coronary bypass surgery with at least one PAS-Port anastomosis (total number of PAS-Port implants: n = 117). At 6 months after surgery all patients were followed up clinically and 86 patients with 101 PAS-Port implants underwent either a multidetector computed tomographic scan or coronary angiography. Actuarial freedom from MACCE (major adverse cardiac and cerebrovascular events) was assessed at 5 years after surgery.

RESULTS:
Six-month PAS-Port patency was 88%. The inner diameter of the graft at the implant site (measured in 26 patients) did not reveal any pathologic narrowing (mean inner diameter 3.1 ± 0.6 mm). At 5 years, freedom from overall MACCE was 79% ± 5% and freedom from PAS-Port target vessel revascularization was 94% ± 6%.

CONCLUSIONS:
The routine use of PAS-Port was associated with good vein graft patency at 6 months and a low incidence of MACCE at 5 years after surgery. No evidence of implant-related graft stenosis was detected.