Coronary-to-coronary bypass graft with the radial artery at 15 years

Pontage coronaro-coronarien avec l’artère radiale à 15 ans

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A 74-year-old patient with triple vessel disease had undergone coronary bypass surgery 15 years earlier. In addition to the left internal mammary artery anastomosed to the left anterior descending coronary artery, the radial artery (RA) had been used to bypass the right coronary artery. Since its length did not allow a direct anastomosis to the aorta, the proximal end of the RA had been inserted to the initial segment of the right coronary artery which was free from atheroma. Due to this unusual surgical strategy, a control angiogram 6 months later was performed which showed a perfectly patent radial graft (Fig. 1). The patient had remained asymptomatic for 15 years at which time a routine CT scanner (128-slice) was realized in order to evaluate graft function. It showed a widely open coronary-to-coronary RA graft (Fig. 2), likewise the mammary-to-LAD graft was patent.
Figure 1. Angiogram at 6 months showing the radial artery graft anastomosed to the proximal part of the right coronary artery (from Tixier DB, Acar C, Carpentier AF. Coronary–coronary bypass using the radial artery. Ann Thorac Surg 1995;60:693–4).

Figure 2. Same view at 15 years obtained by CT scanner demonstrating excellent long term patency.