

Treatment of huge saphenous aneurysms with covered graft stents

Dev safen anevrizmaların kaplı greft stentlerle tedavisi

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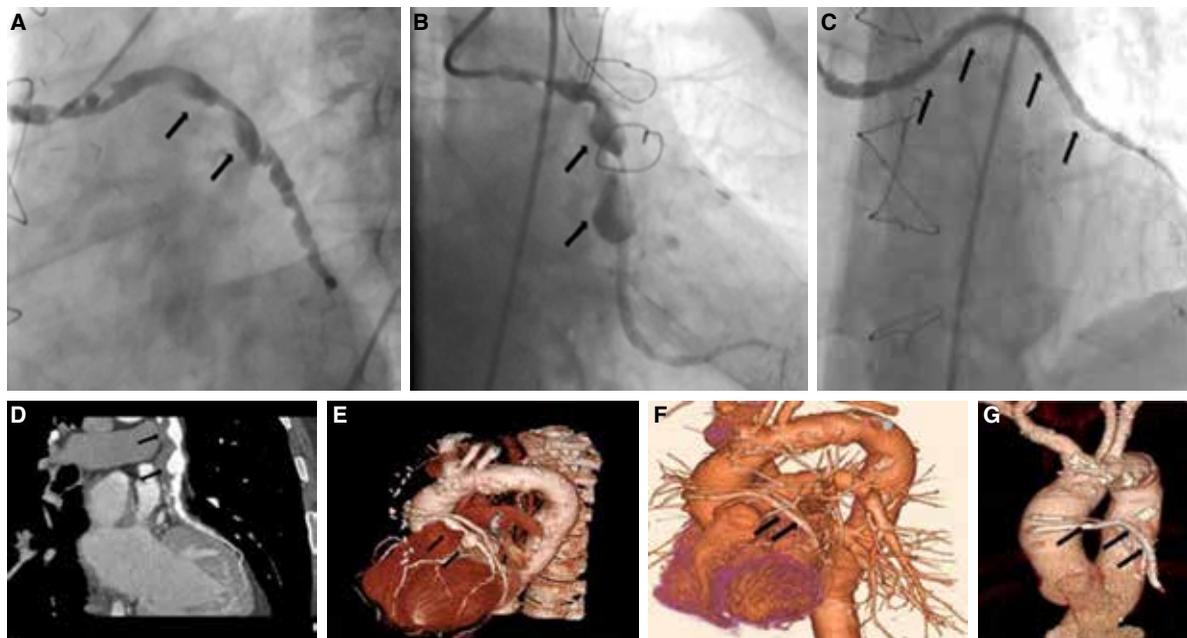
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A 73-year-old man who had undergone 3-vessel coronary artery bypass grafting 22 years prior was admitted with accelerated angina pectoris. The patient underwent coronary angiography, the findings of which were as follows: 50% stenosis in the proximal and mid-left anterior descending arteries, 100% stenosis in the proximal circumflex artery, 50% stenosis in the right coronary artery, 100% stenosis in the left internal mammary artery-to-left anterior descending artery graft, 70% stenosis in the proximal and 99% stenosis in the mid-saphenous vein graft (SVG)-to-obtuse marginal (OM) artery, and consecutive huge saphenous aneurysms in the SVG-to-diagonal artery. The culprit lesion was thought to be 99% stenosis in the mid-SVG-to-OM artery, due to severe narrowness. Therefore, 4.0 x 28-mm and 3.5 x 16 mm-stents were implanted across the

mid and proximal segments of the SVG-to-OM artery, respectively. Following stent placement, the patient described clinical improvement of anginal symptoms. However, compared to angiography performed 1 year prior (Figure A), rapid and advanced enlargement in size of aneurysms was present in the mid segment of the SVG-to-diagonal artery, which had the potential to result in rupture and sudden cardiac death (Figure B). Because surgical correction would have been much too risky, percutaneous coronary intervention was planned. Cardiac computed tomography scan was performed to assess detailed anatomy of saphenous aneurysms (Figure D, E). Three overlapped covered stents, beginning from the distal of the distal aneurysm to the proximal of the proximal aneurysm (4.5 x 26 mm, 4.0 x 26 mm, and 3.5 x 26 mm) were placed using 8-F sheath. Finally, a 4.5 x 32-mm bare metal stent was implanted for the ostial and proximal stenosis of SVG-to-diagonal artery (Figure C). Post-procedure computed tomography angiography revealed no residual aneurysms (Figure F, G). However, the patient was admitted with late covered graft stent thrombosis 2 months after implantation.



Figures– (A) Angiogram of saphenous vein graft with mildly dilated aneurysms, obtained 1 year prior, (B) angiogram of 2 consecutive, rapid-enlarged saphenous aneurysms, (C) post-procedural angiography; arrows show aortodiagonal saphenous vein graft without residual aneurysms, with preserved graft patency and distal run-off. (D) Computed tomography angiogram showing 2 consecutive saphenous aneurysms, (E) 3-dimensional reconstruction of the saphenous aneurysms, (F, G) arrows show aortodiagonal saphenous vein graft without residual aneurysms after covered graft stent implantation.