their case that they could use a side-biting clamp and excise it from a right thoracotomy.

I do not believe, however, that this approach can be used for the repair of Kommerell’s diverticula/aneurysms with an associated aberrant subclavian artery. For this condition we both agree that a subclavian-carotid transposition followed by a right thoracotomy and repair with atriofemoral bypass provides the most favorable approach.

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REFERENCES

Local treatment of Dacron patch graft infected with biofilm-producing Staphylococcus epidermidis using antibiotic-releasing porous apatite ceramic: An experimental study in the rabbit

Some Staphylococcus epidermidis strains produce an extracellular glycoalkyly called biofilm and exhibit a high resistance to antibiotics due to this biofilm.1,2,3 We previously reported the efficacy of local treatment with antibiotics-releasing apatite ceramic (TCP) for prosthetic graft infection by S aureus.4,5 Usually S aureus does not produce biofilm. Afterwards, we extended our new treatment method to the other major prevalent pathogen, biofilm-producing S epidermidis.

S epidermidis, American Type Culture Collection 35984, was used as the infecting organism. Teicoplanin (TEIC, Aventis Pharma S A, Germany) was used as the antibiotic. The minimum inhibitory concentration of TEIC for S epidermidis was 2 mg/mL. By using the same technique of our previous reports, Dacron grafts were patched in the anterior wall of the abdominal aorta of the rabbits. These animals were divided into the following four groups: (1) the NS group (n = 6), a no-treatment group with a sterile prosthetic vascular graft; (2) the NB group (n = 8), a no-treatment group with a prosthetic vascular graft infected with S epidermidis; (3) the TA group (n = 6), a group with a prosthetic vascular graft infected with S epidermidis, treated two weeks after the operation with TEIC (100 mg) locally administered on the graft; and (4) the TT group (n = 6), a group with a prosthetic vascular graft infected with S epidermidis, treated two weeks after the operation with TEIC-loaded TCP placed on the infected graft. The TT group received the same amount of TEIC (100 mg) as the TA group. Four weeks after the first operation, all the patched graft was removed from the abdominal aorta and cultured after its sonication. Cotton swabs of perigraft fluid and of the graft surface, tissue around the prosthetic vascular graft, and arterial blood were cultured. In the NS group, no bacteria were recovered by all culturing methods in all animals. In the NB group, perigraft effusion and poor graft incorporation were recognized in 5 of 8 (63%) animals. S epidermidis was recovered in 6 of 8 (75%) animals by sonication. In the TA group, all animals had normal anastomosis and normal graft incorporation. S epidermidis was recovered in 5 of 6 (83%) animals by sonication. In the TT group, all animals had normal anastomosis, normal graft incorporation, and no perigraft effusion. S epidermidis was not recovered in any animals. Significant differences in the infection rate were found between the NB group and TT group (P < .01) and between the TA group and the TT group (P < .05) (Fig).

We found similar effectiveness against Dacron patch graft infection with biofilm-producing S epidermidis and efficacy of local treatment with antibiotics-releasing TCP for prosthetic graft infection.

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REFERENCES

Regarding “Acute arterial complications associated with total hip and knee arthroplasty”

Dr Calligaro and colleagues reported on acute arterial complications associated with total hip and knee arthroplasty in the December issue of JVS (J Vasc Surg 2003;38:1170-7). This is an important though rare complication of joint replacement, often with dramatic consequences. In 17 of 18 of their patients with acute ischemia due to arterial occlusion, surgery to restore blood flow salvaged the threatened limbs. In one patient, ischemia was the result of microembolii to the anterior tibial artery branches, and a fasciotomy was performed. Neither the embolicigenic source nor any intervention to exclude or remove it was reported.

This prompted me to write a description of the significant consequences of microembolization following a case of total knee arthroplasty. Beginning a week after knee arthroplasty, episodes of...