

LETTERS TO THE EDITOR

Regarding "Extracranial carotid aneurysm in Takayasu's arteritis"

We read with interest the paper of Dr Tabata and colleagues¹ on patients surgically treated for extracranial carotid aneurysm in Takayasu's arteritis.

Although we agree with them about the unclear relationship between systemic inflammation, its modification by steroid administration, and later anastomotic failure, we disagree with their conclusion that "these experiences alert us to the importance of an all-autologous-vein policy for carotid reconstruction in Takayasu's arteritis." In 1994 we described a case of bilateral common carotid artery aneurysm in Takayasu's arteritis,² and in 1998 one more case was reported by us.³ The clinical diagnosis was confirmed in these three common carotid aneurysms by microscopic evidence of specific inflammatory changes with the presence of multiple granulomatous foci composed of mononuclear cells and foreign body multinucleated giant cells. Both aneurysms treated by saphenous reconstruction developed aneurysmal dilatation of the grafts with thrombosis requiring surgery after 1-year follow-up, while the patient treated with a Dacron tube prosthesis experienced an anastomotic pseudoaneurysm requiring excision and subclavian-carotid bypass after 2 years. All patients were under corticosteroid and cytotoxic treatment before and after the operations. Along with other authors,⁴⁻⁶ we now believe that corticosteroids, together with certain hemodynamic mechanisms including high-speed flow, can further increase the high incidence of pseudoaneurysms in the supraaortic trunks area.

Careful postoperative follow-up is essential to monitor the outcome of this rare entity.

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Reply

In their letter, Otero and Regina indicate that they disagree with our conclusion, based on our experience, of the importance of an all-autologous-vein policy for carotid reconstruction in Takayasu's arteritis.¹

They also suggest that they believe corticosteroids, together with certain hemodynamic mechanisms like high-speed flow, can further increase the high incidence of pseudoaneurysms in the supraaortic trunk area, citing two cases of carotid anastomotic aneurysms from their experience.

Anastomotic aneurysm is a complication that can occur at any time after vascular reconstruction. We have reported 22 non-infected anastomotic aneurysms in 14 patients among 103 consecutive patients with Takayasu's arteritis who were treated surgically.²

In the report, we analyzed six factors by means of life-table estimates and Cox regression analysis to clarify the risk factors that might influence the formation of anastomotic aneurysm. These were (1) the site of anastomoses, which was classified in two ways, whether the anastomoses were made at the aorta or at branches of the aorta and whether the anastomosis was above or below the diaphragm, (2) the characteristic type of disease, aneurysmal or occlusive, (3) the presence of systemic inflammation based on positive C reactive protein or an elevated erythrocyte sedimentation rate before operation and before administration of corticosteroid, (4) the administration of corticosteroid for at least 1 month before or following operation, and (5) whether silk or synthetic suture-material was used. As a result of this analysis, the site of anastomosis, systemic inflammation, and steroid administration had no significant influence on anastomotic aneurysm formation. Rather, anastomotic aneurysms tended to occur after surgery for an aneurysmal rather than an occlusive lesion. So we cannot agree with Otero and Regina's views regarding the formation of anastomotic aneurysms.

Our belief in the importance of an all-autologous-vein policy for carotid reconstruction in Takayasu's arteritis is based on our experience in a relatively small series, however. The rarity of the disease is an obstacle to obtaining larger numbers of cases for statistical analysis. So we must now await the long-term results in patients having autologous-vein carotid reconstruction.

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