The First Carotid Endarterectomy at The Johns Hopkins Hospital

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In May 1957, the American Surgical Association met in Chicago, Ill. An article by Lyons and Galbraith\(^1\) titled “Surgical Treatment of Atherosclerotic Occlusion of the Internal Carotid Artery” attracted the attention of the surgeons from The Johns Hopkins Hospital, Baltimore, Md, who were attending the meeting. It was discussed with the staff of The Johns Hopkins Hospital sometime later.

Several members of The Johns Hopkins Hospital surgical staff were active in the expanding field of arterial surgery. Henry Bahnson, MD, was developing effective surgical treatment of massive aortic aneurysms, and Frank Spencer, MD, had recently returned from Korea where he had pioneered primary reconstruction for arterial injuries. Another stimulating member of the young surgical faculty was David C. Sabiston, Jr, MD. At some time in the subsequent few months, I discussed the possibility of surgical treatment for impending stroke with W. P. McInnis, MD, a senior resident in neurology, who agreed that we should watch for suitable candidates.

On the evening of April 29, 1958, a 50-year-old white man came to the emergency department of The Johns Hopkins Hospital complaining of a tingling of the right hand, weakness of the right arm and leg, and slurring of speech, all within 1 hour’s duration. The patient had been in good health but admitted transient dizzy spells for approximately 2 months. When he was examined, he stated that his symptoms had already begun to improve. There was, however, a demonstrable slight weakness of the right arm and leg with hyperreflexia and some right facial weakness. McInnis saw the patient and called me. We agreed that this patient was a possible candidate for surgical intervention and requested an immediate arteriogram. This showed complete occlusion of the left internal carotid artery at the bifurcation. I was then one of two chief residents in surgery, the other being my close friend, William F. Rienhoff III, MD.

The patient was taken from the department of radiology to the operating room, where a left carotid endarterectomy was done using local anesthesia. No shunt was used, and hypothermia was not employed. I was assisted by J. Alex Haller, MD, and E. S. Horton, MD. Haller became professor of surgery and chief of pediatric surgery at The Johns Hopkins Hospital and recently completed a distinguished career as a leader in pediatric surgery. The postoperative recovery was uneventful, and the patient had no further neurologic symptoms (other than mild transient deviation of the tongue). He was discharged 1 week after the procedure and was given sodium warfarin as anticoagulant therapy.

The patient was presented at the major medical conference, and I was asked to discuss the surgical procedure, but the event certainly did not attract much attention. The patient was followed up carefully for several months as an outpatient, and an attempt to perform an arteriogram by direct arterial puncture was unsuccessful at 3 months. The patient was readmit-

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tied to the hospital in August 1961 because of numbness of the right hand. Arteriography was ordered, but the clinical impression after investigation was that the complaints were due to peripheral neuropathy, and arteriography was not performed. In the hospital record, there is a request dated March 3, 1971, for information concerning the patient from a public health hospital in Baltimore, which suggests that the patient was alive at that time.

There are several things about this patient and his treatment that may be of interest. The first is that I recall clearly that the planned procedure was endarterectomy. This is not the procedure that was described in the article by Lyons and Galbraith1 nor in the report of the first successful arterial reconstruction by Eastcott et al.2 Endarterectomy was being used for other peripheral vascular lesions, and I do not recall who suggested its use in this instance. A second item of interest is that no one on the operating team had ever seen a carotid endarterectomy, and there certainly were no animal models. In the current litigious society and with detailed credentialing, one wonders whether this procedure would even be considered. A third point that emphasizes the differences between that era and the present is that no attending staff was consulted nor was there ever any suggestion that this should have occurred. The event was several years prior to Intermediary Letter No. 372 of the Bureau of Health Insurance, Baltimore.

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REFERENCES


Correction