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## Neuroradiologic Classics

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With the Historical Perspective by Victor Haughton in this issue of the *AJNR*, the series Historical Perspectives–Neuroradiologic Classics, as it relates to 10 important papers in neuroradiology, comes to an end. (Previous reviews appeared in the October 1999; January, March, May, and August 2000; and January, March, May, and September 2001 issues of the *AJNR*.) Some of the reviews deal with basic research, and others, a combination of basic and applied research. The reader who has followed this series may well ask, “What benefit has been achieved by compiling this short and very selective history of noteworthy articles in neuroradiology? Is it not presumptuous to compile a history when the specialty is less than 100 old?” Nevertheless I believe that understanding and recognizing the basis of our science is necessary as we move into the 21st century.

Angiography would have developed even if Moniz did not persistently attempt to obtain a cerebral angiogram in 1927. Five years later, Meyerson and Loman were injecting Salvarsan into the carotid arteries of patients with cerebral syphilis, and it would have been a short step to the discovery of a radiopaque substance that was safe for carotid injection. The message of Moniz’s experiments is controversial. Today, it would be impossible to place patients at risk, without their providing informed consent, for an experiment in which the outcome could be death or stroke. What is commendable, however, is Moniz’s remarkable persistence in carrying out his experiments and the patients’ willingness to accept the risks. (Note: Two errors appear in the Moniz review. First, Moniz was born in 1874, not 1974; second, the imaging findings in the first patient were *nondiagnostic* not *diagnostic*.)

Also, serendipity has been a factor in basic research. Had Sicard’s pupil not advanced the needle too far (as one theory proposes), he never would have injected Lipiodol into the subarachnoid space and enabled his mentor to discover myelography. Would myelography have been discovered without this accident? As with cerebral angiography, somebody else would have developed a contrast agent that was safe for injection into the spinal canal. Still, accidents happen, and the scientist, using his or her imagination and learning from mistakes, pushes the envelope and advances knowledge.

Amundsen and others in this series exemplify the process of taking previous ideas and expanding their clinical applications. Independence of thought and creativity are important attributes for those who conduct clinical research (1), and their fruit form the basis of some of our present techniques.

Recent editorial commentaries in the October 2001 issue of the *AJNR* point out the danger to the future of neuroradiology, as fewer young researchers are entering the field. I agree with many of the steps advocated to reverse this alarming trend. We cannot allow our specialty to wither on the vine. I hope that, by reading some of the articles on which these reviews are based, young researchers may be inspired to enter our specialty and contemplate a career in neuroradiology.

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### Reference

1. Wolpert SM. **The Circle of Willis.** *AJNR Am J Neuroradiol* 1997; 18:1033–1034