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How was the Seldinger Technique Developed? - part 2

Dr. Seldinger published his discovery in 1953 in the *Acta Radiologica* and went on to perform more selective angiographies of the kidney and adrenal glands. His chief at the Karolinska radiology department was not convinced that the innovative arteriography technique would withstand criticism for Dr. Seldinger's thesis and had him begin a second project on the development of percutaneous cholangiography using the same principles [2]. Dr. Seldinger defended his doctoral thesis on "Percutaneous Transhepatic Cholangiography" in 1966, qualified for the title of Docent of Radiology in 1967, and returned home to Mora where he became the chief of the radiology department at the local hospital [1]. He remained there for the rest of his career until he passed away at his home in 1998. Dr. Seldinger is remembered as a pioneer of interventional radiology and one of his memoirs suggested that "no single technical contribution has impacted the development of angiography and the realization of interventional radiology as Seldinger's method" [2].

The Seldinger technique is still widely used today by interventional radiologists, interventional cardiologists, surgeons, anesthesiologists, urologists, and critical care physicians. It is used in arteriography, venography, cholangiography, and gaining access into hollow organs or fluid collections. There have been slight modifications on the technique including ultrasound guidance and smaller equipment to access the vessels; but overall, the basic principles of the technique remain the same.

- 1. Noel-Lamy, M., *The Seldinger technique: a short history, and its applications 60 years later.* University of Toronto Medical Journal, 2016. **93**(1): p. 30.
- 2. Greitz, T., Sven-Ivar Seldinger. American Journal of Neuroradiology, 1999. 20(6): p. 1180-1181.
- 3. Sven-ivar Seldinger: biography and bibliography. AJR Am J Roentgenol, 1984. 142 (1):4.