

## **History of the vertebral venous plexus and the significant contributions of Breschet and Batson.**

Before the 18th century, the vertebral venous plexus (VVP) received scant mention, had no clinical relevance, and was largely ignored by anatomists, most likely because of its location and nondistensible nature. Gilbert Breschet in 1819 provided the first detailed anatomic description of the VVP, describing it as a large plexiform valveless network of vertebral veins consisting of 3 interconnecting divisions and spanning the entire spinal column with connections to the cranial dural sinuses distributed in a longitudinal pattern, running parallel to and communicating with the venae cavae, and having multiple interconnections. More than a century passed before any work of significance on the VVP was noted. In 1940, Oscar V. Batson reported the true functionality of the VVP by proving the continuity of the prostatic venous plexus with the VVP and proposed this route as the most plausible explanation for the distribution of prostate metastatic disease. With his seminal work, Batson reclassified the human venous system to consist of the caval, pulmonary, portal, and vertebral divisions. Further advances in imaging technology confirmed Batson's results. Today, the VVP is considered part of the cerebrospinal venous system, which is regarded as a unique, large-capacitance, valveless plexiform venous network in which flow is bidirectional that plays an important role in the regulation of intracranial pressure with changes in posture and in venous outflow from the brain, whereas in disease states, it provides a potential route for the spread of tumor, infection, or emboli.