Ventriculopleural shunt

Ventriculopleural shunt (VPLS) has also been used as an alternative to the peritoneal and atrial shunts since 1954.

It is considered for draining CSF in selected patients when conventional sites are not suitable either due to adhesions, infection, thrombosis or obliteration. Studies have suggested that VPLS is an acceptable alternative for draining CSF in children as well as among adults.

The most common complication following VPLS placement is pleural effusion ¹.

A single-center, retrospective case series analysis was conducted for VPL shunt insertions and revisions over a period of 5 years. Demographic as well as clinical data were collected. Ventriculopleural shunt survival was assessed using Kaplan-Meier curves and the log rank (Cox-Mantel) test.

Twenty-two VPL shunts were inserted in 19 patients. Median survival of the VPL shunts was 14 months. Pathological indication for the VPL shunt did not significantly affect survival. A total of 10 complications was observed: 2 infections, 2 cases of overdrainage, 2 obstructions, 1 distal catheter retraction, 2 symptomatic pleural effusions, and 1 asymptomatic pleural effusion.

Ventriculopleural shunting is a safe and viable second-line procedure for cases in which ventriculoperitoneal shunts are unsuitable. While VPL shunts have a high revision rate, their complication rate is comparable to that of VP shunts. Ventriculopleural shunt survival can be improved by careful patient selection and the implementation of a combination of valves with antisiphon devices ².

¹ http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2930656/