

Lumboperitoneal shunt

Lumboperitoneal [shunt](#) is a [cerebrospinal fluid shunt](#), that has the advantage of completely extracranial surgical management, minimizing [intracranial complications](#). An [LP shunt](#) has been intentionally adopted for patients who require [cerebrospinal fluid diversion](#).

Types

[Horizontal-Vertical Lumbar Valve System](#)

[Lumboperitoneal shunt with the Codman Hakim programmable valve](#)

[Strata NSC Lumboperitoneal Adjustable Pressure Shunt](#)

[Miethke Lumboperitoneal DualSwitch Valve Shunt](#)

[Conventional Silastic Lumboperitoneal Valve-less Shunt](#)

Indications

[Lumboperitoneal shunt indications](#).

Technique

[Lumboperitoneal shunt technique](#).

Complications

see [Lumboperitoneal shunt complication](#).

Case series

In a three-year study, treated by LPS, patients undergoing preoperative evaluation were included into study group and others without preoperative evaluation were included into control group. Perioperative conditions, including [Kiefer score](#) (KHS), symptomatic control rate (SCR), Evans index, complications, long-term shunt revision rate, and quality of life (QOL), were synchronously investigated.

93 eligible patients were included in the study (study group: 51, control group: 42). The baseline characteristics of two groups were basically similar. The results showed patients in study group had better short-term improvement in symptoms and imageology, including higher SCR (Median, 62.5% vs 50%, $P=0.001$), more reduction in Evans index (0.08 ± 0.05 vs 0.05 ± 0.04 , $P=0.002$), and lower incidence of postoperative complications (Median, 35.3% vs 57.1%, $P=0.04$). Similarly, the incidence of shunt revision in study group was dramatically lower than control group (Median, 15.7% vs 40.9%, $P=0.006$) in line with the revision-free curve ($P=0.002$), in which suggested most of patients received revision, if needed, within 3 months. Additionally, patients in study group had better QOL.

In conclusion, patients who underwent the evaluation before LPS had better short-term and long-term outcomes, suggesting it would be a promising strategy to correctly select patients for LPS with prolonged favorable shunt outcomes ¹⁾.

1)

Sun T, Yuan Y, Zhang Q, Zhou Y, Li X, Yu H, Tian M, Guan J. Establishing a preoperative evaluation system for lumboperitoneal shunt: Approach to attenuate the risk of shunt failure. World Neurosurg. 2018 Jun 12. pii: S1878-8750(18)31236-1. doi: 10.1016/j.wneu.2018.06.021. [Epub ahead of print] PubMed PMID: 29906581.

From:

<https://operativeneurosurgery.com/> - **Operative Neurosurgery**

Permanent link:

https://operativeneurosurgery.com/doku.php?id=lumboperitoneal_shunt

Last update: **2021/04/22 11:58**

