Partial Cyst Resection, Fabrication, Imbrication and Duraplasty of Symptomatic Sacral Tarlov Cysts

ABSTRACT

Tarlov cysts are pathological cerebrospinal fluid-filled sacs located in the space between the perineum and endoneurium of the nerve roots. Symptomatic Tarlov cysts are extremely rare. There is no consensus regarding the optimal surgical treatment for it up to date. We encountered a recurrent symptomatic sacral Tarlov cyst of a patient whose symptoms resolved after undergoing partial cyst resection, fabrication, imbrication, and duraplasty of sacral Tarlov cysts. A 53-year-old man was initially presented with worsening lower back and buttock region pain, sensory changes involving S1 – S3 distribution of the left lower limb in 2014. The initial magnetic resonance imaging (MRI) lumbosacral had been carried out and revealed a perineural cyst at the level of S1 - S3. The patient did S1 - S3 laminectomy, fabrication, and imbrication after failed conservative treatment and his symptoms resolved for three years. However, similar symptoms recurred in 2017 and the repeated MRI revealed a recurrent well-defined multiloculated cystic structure was seen arising from the spinal canal of S1 – S3 level. The second time, the patient underwent laminectomy S1 - S3, partial cyst resection, fabrication, imbrication, and duraplasty of the sacral region. Many proposed surgical options are available for treating the symptomatic Tarlov cysts. There is no literature reviewed on the best surgical option for the recurrent symptomatic Tarlov cyst. We proposed sacral laminectomy, partial cyst resection, imbrication, fat graft packing, fabrication, and duraplasty in recurrent symptomatic sacral Tarlov cyst.