Microsurgical treatment of symptomatic sacral Tarlov cysts.

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Abstract:

OBJECTIVE: Providing relief of symptomatic radiculopathy resulting from sacral perineural cysts has proven difficult. Our goal was to improve the treatment of these cysts with microsurgical cyst fenestration and imbrication, while minimizing functional damage to neural tissues. METHODS: We retrospectively reviewed the records for eight adult patients with large (2-3-cm) sacral perineural cysts who were treated at the University of California, San Francisco, between October 1992 and April 1999. All patients presented with radicular pain that was refractory to medical treatment. Three patients also reported urinary incontinence. We performed sacral laminectomies with microsurgical cyst fenestration and cyst imbrication for all patients, using intraoperative electromyography to minimize damage to the sacral nerve roots. For seven patients, we reinforced the closures with epidural fat or muscle grafts and fibrin glue application. For five patients with cysts that communicated with the subarachnoid space in computed tomographic myelograms, we placed lumbar drains for cerebrospinal fluid diversion for several days postoperatively. We assessed outcomes, using telephone questionnaires and periodic postoperative physical examinations, 3 to 73 months after surgery. RESULTS: After surgery, radicular pain improved markedly for four patients and moderately for three patients; one patient with initial improvement experienced pain recurrence 9 months later. Bladder control improved markedly for two of the three patients with bladder dysfunction. There were no cerebrospinal fluid leaks and no new postoperative neurological deficits. CONCLUSION: Microsurgical cyst fenestration and imbrication are effective treatments for long-term relief of refractory painful radiculopathy and urinary incontinence associated with large

sacral perineural cysts.