CT-guided percutaneous injection of fibrin glue for the therapy of symptomatic arachnoid cysts.

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Abstract:

BACKGROUND AND PURPOSE: Although often asymptomatic, enlarging sacral arachnoid cysts can also cause significant discomfort. These symptomatic sacral arachnoid cysts require specific treatments to facilitate local decompression. The main drawback of the surgical managements is the high risk of recurrence and complications. To decrease risks, we had been attempting to seek a simple and safe method to manage the symptomatic sacral arachnoid cysts. CT-guided percutaneous fibrin glue therapy is a new nonsurgical alternative. To evaluate the efficacy of the novel nonsurgical approach, we conducted this retrospective study of 38 patients. MATERIALS AND METHODS: Thirty-eight patients with symptomatic sacral arachnoid cysts underwent fibrin glue therapy in our hospital between June 2006 and May 2009. The clinical results of improvement in pain and neurologic function were evaluated after an average of 25 months of follow-up, and changes on the imaging findings were evaluated. Preoperative and postoperative pain severity was assessed according to a 10-cm VAS. Moreover, we also analyzed the postoperative complications. RESULTS: Most patients experienced some degree of pain relief and functional improvement after fibrin glue therapy, with most experiencing complete or marked resolution of clinical symptoms. Twenty-one patients (55.3%) reported excellent recovery, 12 (31.5%) reported good recovery, 4 (10.5%) reported fair recovery, and 1 (2.6%) reported poor recovery. The overall percentage of positive outcomes (excellent and good recovery) was 86.8%. No serious postoperative complications were discovered. CONCLUSIONS: CT-guided percutaneous injection of fibrin glue

therapy is simple, safe, and effective for the management of symptomatic sacral arachnoid cysts.