Percutaneous fibrin glue therapy for meningeal cysts of the sacral spine with or without aspiration of the cerebrospinal fluid.

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Abstract:

Object. The authors assessed the efficacy of computed tomography (CT)-guided percutaneous injection of fibrin glue to treat meningeal cysts of the sacral spine in patients with back pain, and evaluated the necessity for cerebrospinal fluid (CSF) aspiration before glue injection. Methods. Of the 31 patients in this study, 15 underwent injection of fibrin glue under CT guidance after aspiration of more than 15 ml of CSF (Group A), and 16 patients were treated with the glue but without CSF aspiration (Group B). Clinical results were evaluated after an average of 23 months of follow-up, and changes on the imaging studies were also evaluated. The clinical outcome and postoperative complications were analyzed. Results. All 31 patients experienced resolution or marked improvement of symptoms for as long as 28 months after fibrin glue therapy. No patient experienced recurrence of symptoms during the follow-up interval. The postoperative pain relief was statistically significant ($p < 0.001$) according to evaluations in which a 100-mm visual analog pain scale was used. There were no statistical differences between the two groups ($p > 0.05$). Conclusions. Percutaneous CT-guided fibrin glue therapy for sacral arachnoid cysts may be a definitive therapy. It is unnecessary to aspirate the CSF before injection of the fibrin glue.