Adhesive arachnoiditis after percutaneous fibrin glue treatment of a sacral meningeal cyst: Case report.

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Abstract:

The authors present the case of a 64-year-old woman who was referred for severe sacral pain. She reported that her pain had been longstanding, and had greatly increased after percutaneous fibrin glue placement therapy for a sacral meningeal cyst 2 months earlier at a different hospital. An MRI scan obtained immediately after fibrin glue placement at that hospital suggested that fibrin glue had migrated superiorly into the subarachnoid space from the sacral cyst to the level of L-4. On admission to the authors' institution, physical examination demonstrated no abnormal findings except for perianal hypesthesia. An MRI study obtained at admission demonstrated a cystic lesion in the peridural space from the level of S-2 to S-4. Inhomogeneous intensity was identified in this region on T2-weighted images. Because the cauda equina and nerve roots appeared to be compressed by the lesion, total cyst excision was performed. The cyst cavity was filled with fluid that resembled CSF, plus gelatinous material. Histopathological examination revealed that the cyst wall was composed of hyaline connective tissue with some calcification. No nervous tissue or ganglion cells were found in the tissue. The gelatinous material was acellular, and appeared to be degenerated fibrin glue. Sacral pain persisted to some extent after surgery. The authors presumed that migrated fibrin glue caused the development of adhesive arachnoiditis. The risk of adhesive arachnoiditis should be considered when this therapy is planned. Communication between a cyst and the subarachnoid space should be confirmed to be sufficiently narrow to prevent the migration of injected fibrin glue. ©AANS, 2014.