

Preoperative Sclerotherapy Using Sodium Tetradecyl Sulphate (Fibro-Vein™) Can Assist in the Management of Vertebral Hemangiomas

Vertebral hemangiomas are benign lesions accounting for 2 to 3% of all spinal tumors. They are usually asymptomatic and found incidentally on imaging. Uncommonly, vertebral hemangiomas with significant epidural extension can result in radiculopathy or spinal cord compression. Decompressive surgery with or without stabilization is often required when neurological deficits are present. However, surgery can be associated with massive hemorrhage as these tumors are hypervascular. Preoperative embolization and sclerotherapy are well-known management strategies used to minimize intraoperative bleeding and improve symptoms. Recently, the use of sclerosants such as ethanol has decreased, due to reported complications such as Brown-Sequard syndrome. We describe the use of sodium tetradecyl sulfate (Fibro-Vein™, STD Pharmaceutical, Hereford, UK) as an effective alternative to ethanol in the preoperative management of vertebral hemangiomas. To our knowledge, this has not been previously reported. In three patients, we demonstrated minimal intraoperative blood loss using a combination of preoperative embolization of arterial feeders and sclerotherapy with sodium tetradecyl sulfate to control and secure venous drainage. No patients developed complications related to the procedure. In addition to minimal blood loss, a clear dissection plane was also noted intraoperatively.

使用十四烷基硫酸鈉（Fibro-Vein™）作術前硬化劑治療，可以幫助治療脊柱血管瘤

良性脊柱血管瘤佔所有椎管內腫瘤的 2 至 3%。他們通常沒有症狀和影像學檢查時偶然發現的。罕見地，顯著的硬膜外擴展的脊柱血管瘤可能會導致神經根病變或脊髓壓迫症。當神經功能出現缺損時，一般都需要有或沒有內固定的減壓手術。然而，手術中有機會會大量出血，因為這些腫瘤都有豐富的血供。術前栓塞及硬化劑治療都是眾所周知的管理策略，以減少術中的出血和改善症狀。由於併發症的報告，如 **Brown-Sequard** 氏綜合症，最近使用硬化劑（如乙醇）的減少了。我們描述了十四烷基硫酸鈉（Fibro-Vein™，STD Pharmaceutical，赫里福郡，英國）作為一種有效的替代劑，代替乙醇為脊柱血管瘤在術前治療。據我們所知，這以前並未曾報告過。在 3 位病人中，結合術前栓塞動脈局部擴張和十四烷基硫酸鈉作硬化劑治療以控制和確保靜脈引流的最小，在術中的失血量最少。沒有患者出現手術後的併發症。除了最小的失血量，手術中也能有清晰的解剖面。