

Allergic reaction to a bovine dural substitute following spinal cord untethering: Case report.

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Abstract:

Bovine tissues are now routinely used for dural closure in cranial and spinal surgery. The authors report the case of an 18-year-old woman with a history of myelomeningocele who had symptoms of tethered cord syndrome and presented to a regional hospital. At that hospital she underwent a cord untethering procedure. The spinal dura was closed with Durepair, a dural substitute derived from fetal bovine skin. Her postoperative course was complicated by a cerebrospinal fluid leak that was surgically repaired. Following this, she developed erythroderma, intermittent fevers, eosinophilia, and marked elevation in serum immunoglobulin E. She was then transferred to the authors' institution. A skin antigen test to beef was administered, which revealed a positive reaction. A radioallergosorbent test to beef also yielded positive results. She was taken to the operating room for removal of the bovine graft due to concern for an allergic reaction to the graft. The graft material showed evidence of eosinophilic infiltration. Her clinical symptoms and laboratory values all improved after surgery. To the authors' knowledge this is the first reported case of an allergic reaction to bovine-based dural substitutes.