

Long-term back pain after a single-level discectomy for radiculopathy: incidence and health care cost analysis.

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Source

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Abstract

OBJECT:

The most common spinal procedure performed in the US is lumbar discectomy for disc herniation. Longterm disc degeneration and height loss occur in many patients after lumbar discectomy. The incidence of mechanical back pain following discectomy varies widely in the literature, and its associated health care costs are unknown. The authors set out to determine the incidence of and the health care costs associated with mechanical back pain attributed to segmental degeneration or instability at the level of a prior discectomy performed at their institution.

METHODS:

The authors retrospectively reviewed the data for 111 patients who underwent primary, single-level lumbar hemilaminotomy and discectomy for radiculopathy. All diagnostic modalities, conservative therapies, and operative treatments used for the management of postdiscectomy back pain were recorded. Institutional billing and accounting records were reviewed to determine the billed costs of all diagnostic and therapeutic measures.

RESULTS:

At a mean follow-up of 37.3 months after primary discectomy, 75 patients (68%) experienced minimal to no back pain, 26 (23%) had moderate back pain requiring conservative treatment only, and 10 (9%) suffered severe back pain that required a subsequent fusion surgery at the site of the primary discectomy. The mean cost per patient for conservative treatment alone was \$4696. The mean cost per patient for operative treatment was \$42,554. The estimated cost of treatment for mechanical back pain associated with postoperative same-level degeneration or instability was \$493,383 per 100 cases of first-time, single-level lumbar discectomy (\$4934 per primary discectomy).

CONCLUSIONS:

Postoperative mechanical back pain associated with same-level degeneration is not uncommon in patients undergoing single-level lumbar discectomy and is associated with substantial health care costs.