## Short term assessment of Functional Outcomes and Quality of Life after Thoracic and Lumbar Spinal Metastasis Surgery

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INTRODUCTION:

**STUDY DESIGN:** prospective cohort study

**BACKGROUND:** Spinal metastases are being diagnosed more frequently because of increasing life expectancies and advances in the diagnosis and treatment of primary tumors.

**OBJECTIVE:** The aim of this study was to assess functional outcome and quality of life after surgical management for patients with spinal metastases.

METHODS:

**METHODS:** A total of thirty-three patients with thoracic and lumbar spine metastases underwent surgical management at Kasr Al Ainy Hospital, Cairo University, between November 2021 and August 2023, with one year of follow-up or until death in a prospective cohort study. The Arabic version of the European Quality of Life 5-Dimensions (EQ-5D) and the Eastern Cooperative Oncology Group Performance Status (ECOG-PS) were used for assessment of quality of life and functional outcome.

## RESULTS:

**RESULTS:** The mean age was  $52.12 \pm 13.4$  years (range 23-70 years), 22 (66.7%) were females, and 11 were males (33.3%). Patients were divided into 3 groups according to the revised Katagiri score: 12 patients (36.4%) were at low risk (0 to 3), 18 patients (54.5%) were at intermediate risk (4 to 6), and 3 patients (9.1%) were at high risk (7 to 10). The mean survival was  $5.44 \pm 3.46$  months (range 1-13), and there was no perioperative death (within one month postoperative). Sixteen patients (48.5%) survived for more than one year, and 17 patients (51.5%) died from different causes related to the natural history of tumor metastasis.

DISCUSSION AND CONCLUSION:

**Discussion:** Our findings provide a snapshot of the results of spinal surgery and cannot be applied to all metastatic spine tumor patients. The surgeon decides whether to operate based on prognostic information from the surgical and oncological teams, including life expectancy, patient expectations, and family conversation

**CONCLUSION:** We concluded that with proper patient selection and appropriate planning and care for patients with spinal metastases, surgical intervention can improve quality of life and function. However, the clinical course of patients who survive there after surgery remains unclear. Therefore, additional long-term studies are needed.

