Clinical Outreach of Functional Metastase Spine Disease
Before and After the Measurement of Posterior Bone
Instrumentation in Haji Adam Malik Hospital, Medan

Fadli Yogi Arif¹, Otman Siregar², Husnul Fuad Albar²

Orthopedics and Traumatology Department University of North Sumatra -RSUP Haji
Adam Malik, Medan, Indonesia
¹Orthopedic and Traumatology Resident, University of North Sumatra, Medan,
Indonesia
²Teaching Staff Dept. Orthopedics and Traumatology, University of North Sumatra,
Medan, Indonesia

Abstract : Objective -The aim of this study was to determine the comparison of functional
clinical outcome of metastase spine disease before and after the action of posterior spinal
instrumentation. Material and Methods-This Research using Sixty-one (61) subjects of spine
disease metastases were divided into 2 groups, with thirty-six (36) subjects not operating and
twenty-five (25) subjects operating spinal posterior instrumentation that met the criteria of
Spinal Instability Neoplastic Score (SINS) in the period September 2014 to February 2018
included in the inclusion criteria included in this study where twenty-two (22) total subjects
were obtained and data was collected by interviewing techniques assessing clinical outcomes
based on VAS, ODI and SF-36. Result-The distribution of 22 Metastase Spine Disease samples
with 12 females (54.5%) and 10 females (45.5%) men, with the youngest age of the 41 years
research subjects and the oldest age from the 78-year study subjects with mean and standard
deviations amounting to 51.7 ± 14.0 years. There were significant differences in results from
clinical outcomes before and after the action of posterior spinal instrumentation with a
significance value of 0.001 (p <0.05). Conclusion-The functional clinical outcome of metastase
spine disease after posterior spinal instrumentation is better than clinical outcome before the
action of posterior spinal instrumentation with statistical values (P <0.01), this is in accordance
with the initial hypothesis of the study, namely there are differences in functional clinical
outcome of spinal metastase patients disease before and after the action of posterior spinal
instrumentation.

Key Words: Metastase Spine Disease; Visual Analog Scale (VAS); Oswestry Disability Index
(ODI); SF – 36

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120333

*****