

THE STUDY ON PATIENTS' CLINICAL AND FUNCTIONAL OUTCOME AND QUALITY OF LIFE AFTER NEUROTISATION SURGERY FOR BRACHIAL PLEXUS INJURY

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INTRODUCTION:

Brachial Plexus Injury (BPI) is a debilitating injury resulting in loss of upper limb function, has poor prognosis of recovery and limited functional return offered after surgery. Commuting male predominant, often had their career affected as sequelae of injury^[1]. Surgeries offered target restoration of functional outcome. This study investigates relationship between functional outcome and quality of life.

METHODS:

Retrospective Cohort Study in Hospital Sultanah Bahiyah, Alor Setar. Study period from 1st Jan 2018 till 31st May 2021. Patient's age > 18, without traumatic brain injury or surgeries after neurotization surgery. Assessed patients clinically with DASH and SF-36 Questionnaire.

RESULTS:

25 samples with 24 median ages. 81% (n = 21) males, 48% (n = 12) returned to work. Results of parameters shown in Table 1.

Table 1 shows the statistical value and coefficients between parameters

Parameters	Correlation Coefficient	p-value
AGE VS DASH	0.422	0.035
AGE VS PCS	-0.515	0.008
AGE VS MCS	-0.163	0.436
DASH VS PCS	-0.479	0.016
DASH VS MCS	-0.284	0.17
DASH VS Mental Health	-0.074	0.725

DISCUSSIONS:

Distribution of patients similar with larger epidemiology studies^[2]. Younger patients report better outcome functionally (p = 0.035). Many patients suffer from job change or discrimination at work^[1]. Mental stress from disability, socioeconomic burdens well documented in other studies^[3]. However, average MCS scores in this study is slightly higher than PCS scores. The "Disability Paradox" Phenomenon might be present in these patients^[4]. Better functional outcome equates better physical QOL (p = 0.016), but does not correlate with mental health (p = 0.725). General QOL is lower than median scores of Malaysian general populations^[5]. Inability to regain full function despite surgery might not satisfy patients in daily lifestyle demands and career expectations.

CONCLUSION:

Good functional outcome does not translate to better mental state in terms of quality of life. Discussion about prognosis of injury should including career pathways, socio-economic burdens and daily life expectations. Attention to the mental health of BPI patients, necessitates a holistic approach of care for BPI patients.

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