Prolonged Post Concussive Symptoms of Traumatic Brain Injury (TBI) Patients in a Tertiary Hospital in the Philippines

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Abstract

Statement of the Problem: Sixty-nine million individuals worldwide are estimated to sustain a Traumatic Brain Injury (TBI) each year. The proportion of TBIs resulting from road traffic collisions was greatest in Africa and Southeast Asia (both 56%). In the Philippines, most common cause of traumatic brain injury-related admissions is from motorcycle accidents. The purpose of the current investigation is to measure the post concussion effects on patients with mild TBI. This will support the association of prolonged symptoms in the overall functioning of the patients upon discharge from the hospital.

Methods: Throughout the period of 2 months, patients were evaluated on an outpatient basis, when all are medically stable and able to recall symptoms experienced from day to day. A total of 50 Mild TBI participants have met the following criteria: (1) ≥ 18 years old, and ≤ 70 years old, (2) diagnosis of TBI without intracranial lesion on neuroimaging, (3) completed the Rivermead Post Concussive Symptom Questionnaire (RPQ); (4) no prior history of development disorder, progressive neurological disease, or psychosis

Results and Discussion: Majority of patients, 75% of total participants, scored 10-12 in the first 3 items (RPQ-3), reported headaches, dizziness and nausea, 2 weeks post injury. This is associated with early symptom cluster of concussive symptoms hence earlier reassessment and closer monitoring is recommended. A total of 40% of patients have score of 48 in the RPQ-13. This later cluster of symptoms is associated with having an impact on participation, psychosocial functioning and lifestyle.

Conclusion: Based on the scores of the patients 14 days post injury, it is important to support patients in gradually returning to their daily activities. Progression or non-resolution of symptoms should warrant special re-evaluation and appropriate treatment course.

Image



Name: Date:

After a head injury or accident some people experience symptoms that can cause worry or nuisance. We would like to know if you now suffer any of the symptoms given below. Because many of these symptoms occur normally, we would like you to compare yourself now with before the accident. For each symptom listed below please circle the number that most closely represents your answer.

0 = not experienced at all
1 = no more of a problem
2 = a mild problem
3 = a moderate problem
4 = a severe problem

Compared with **before** the accident, do you **now** (i.e., over the last 24 hours) suffer from:

	not experienced	no more of a problem	mild problem	moderate problem	severe problem
Headaches	0	1	2	3	4
Feelings of dizziness	0	1	2	3	4
Nausea and/or vomiting	0	1	2	3	4
Noise sensitivity (easily upset by loud noise)	0	1	2	3	4
Sleep disturbance	0	1	2	3	4
Fatigue, tiring more easily	0	1	2	3	4
Being irritable, easily angered	0	1	2	3	4
Feeling depressed or tearful	0	1	2	3	4
Feeling frustrated or impatient	0	1	2	3	4
Forgetfulness, poor memory	0	1	2	3	4
Poor concentration	0	1	2	3	4
Taking longer to think	0	1	2	3	4
Blurred vision	0	1	2	3	4
Light sensitivity (easily upset by bright light)	0	1	2	3	4
Double vision	0	1	2	3	4
Restlessness	0	1	2	3	4

Are you experiencing any other difficulties? Please specify, and rate as above.

1.	0	1	2	3	4
2.	0	1	2	3	4

Figure 1. Rivermead Post Concussion Symptoms Questionnaire. King, N., Crawford, S., Wenden, F., Moss, N., and Wade, D. (1995) J. Neurology 242: 587-592

Recent Publications

1. Dewan, M., Rattani, A., Baticulon, R. et al (2019). Estimating the Global Incidence of Traumatic Brain Injury. *Journal of Neurosurgery.* 130, 1039-1048.
2. Consunji, R, Larona, A, Jumangit, A, Ameratunga, S (2013) Motorcycle-Related Trauma in the Philippines resulting in hospital admission: The Epidemiology of Cases at the Philippine General Hospital. *Acta Medica Philippina* 47, 11-14
3. Donders, J, Levitt T (2012) Criterion Validity of the Neuropsychological Assessment Battery after Traumatic Brain Injury. *Clinical Neuropsychology* 27:440-445.
4. Eyres, S., Carey, A., Gilworth, G., Neumann, V., Tennant, A. (2005). Construct validity and reliability of the Rivermead Post Concussion Symptoms Questionnaire. *Clinical Rehabilitation*, 19, 878-887.
5. King, N. S., Crawford, S., Wenden, F.J., Moss, N.E.G. Wade, D.T. (1995). The Rivermead Post Concussion Symptoms Questionnaire: a measure of symptoms commonly experienced after head injury and its reliability *Journal of Neurology*, 242, 587-592.



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