

Title : POST TRAUMATIC STRESS DISORDER AFTER SLIGHT TRAUMATIC BRAIN INJURY : AN EVALUATION OF THE ESPARR COHORT SIX MONTHS AFTER THE CRASH.

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Abstract Title : Post traumatic stress disorder after slight traumatic brain injury: an evaluation of the ESPARR cohort six months after the crash.

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Introduction: Esparr is a prospective cohort study of road accident victims, based on a real-time systematic inclusion and a long term follow-up (at 6 months, 1, 3 and 5 years), in order to study the medical, social and family consequences of these victims and their family.

Objectives: In this paper we interested ourselves more specifically to post traumatic stress disorder (PTSD) 6 months after the accident in the ESPARR population who suffered from mild traumatic brain injury (TBI).

Method: The mild traumatic brain injury were so considered when their Glasgow Score was between 13 and 15 and if no loss of consciousness was reported, or less than 15 minutes. Diagnosis of PTSD was assessed with the 'Post Traumatic Stress Disorder Checklist Scale' French version. (1) Descriptive statistics (mainly χ^2 tests) were used for the description of the mild TBI population. PTSD and associated variables were analysed using multivariate logistic regression models.

Results: Among the 301 mild TBI included in the cohort, 55.8% answered back 6 months after their accident. 22% of TBI suffered from PTSD. Sex (RR for women = 2.1, 95% confidence interval = 1.1-4.3) and age (RR for the 25-34 years old = 2.5; 1.1-5.9 compared to the 16-24 years old) were associated to PTSD. The injury gravity (RR_AIS3+ = 2.1; 1-4.5) was associated to PTSD too. The multivariate analyses enabled us to associate different variables to the PTSD, which were: sex, age, gravity, antidepressant consumption before the

accident, and non remembering the accident. After-effect pains and taking of medicines were also associated with the PTSD.

Conclusion: PTSD is almost frequent in people suffering from Mild TBI. Some short questionnaire should be useful for family doctors to help them to better spot people suffering from PTSD after a mild traumatic brain injury in the aim of proposing them a better follow up (specific prise en charge, psychological help) or appropriate medical treatment.

M-AIS = Maximum Abbreviated Injury Scale

1.Ventureyra V, Yao S-N, Cottraux J, Note I, de Mey-Guillard C. The validation of the Posttraumatic Stress Disorder Checklist Scale in Posttraumatic Stress Disorder and Nonclinical Subjects. *Psychotherapy and Psychosomatics* 2002;71:47-53.

Factors		Number	% SSPT \geq 44	RR (95 % CI)
Sex	H	100	18,0	1
	F	49	30.6	2.1 (1.0-4.2)
Age	16-24	52	19.2	1
	25-34	35	34.3	2.5 (1.1-5.9)
	35+	62	17.7	0.9 (0.3-2.1)
PT Amnesia	No	54	9.3	1
	Yes	94	29.8	3.9 (1.4-11.2)
Plainte	No	100	14	1
	Yes	35	40	2.1 (1.0-4.5)
Medicines	No	134	19.4	1
	Yes	15	46.7	2.87 (1.23-6.69)
Pain	Sans ou à l'effort	62	17.7	1
	Permanentes	52	19.2	3.3 (1.3-8.3)
	Spontanées non permanentes	35	34.3	8.6 ()
Cervical casualties	No	105	16.2	1
	Yes	44	36.4	2.3 (1.1-4.8)
Thoraciq casualties	No	104	19.2	1
	Yes	45	28.9	1.7 (0.8-3.5)
Injury severity	M-AIS < 3	82	14.6	1
	M-AIS \geq 3	67	31.3	1.9 (0.9-3.9)