Incidence of chronic pain and its relation to quality of life three months after ICU discharge

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BACKGROUND

Previous studies have described an increase in chronic pain in patients who have been admitted to the ICU. Furthermore, many patients present a deterioration in their quality of life after ICU discharge, increasing health resources consumption. These patients are susceptible to developing a Post-ICU Syndrome (PICS).

METHODS

A prospective observational study was started in March, 2017. Patients with written informed consent were evaluated three times: at ICU discharge, at 3 and 12 months after ICU discharge. Exclusion criteria included neurological and psychiatric pathology, and history of substance abuse. We enrolled medical and surgical patients discharged after a minimum of 2 days in the ICU.

Figure 1. Time line

OBJECTIVES

The aim of our study is to determine the incidence of chronic pain 3 and 12 months after ICU discharge. The second aim is to determine the impact on quality of life by analyzing anxiety, depression, cognitive impairment and post-traumatic stress disorder.

Numeric Rating Scale (NRS) for pain	Social support (Duke test)
Neuropathic pain (DN4 Scale)	Cognitive impairment (Pfeiffer test)
Anxiety and Depression (HAD test)	Brief Pain interference scale (BPI scale)
Quality of life (EuroQol-5D test)	Post-traumatic Stress Disorder (PTSD) test

Table 1. Data collected in questionnaire

RESULTS

Preliminary results until March 2018 are presented

Figure 2. Flowchart patient recruitment.

Table 2. Demographic data

Variable	NRS <3 %	NRS >3 %
ICU	75	25
3m	70	30
p*		0.549
Neuropathic pain	%	p-value
ICU	20,8	
3m	39	0.013

Variable	3m (%)
HAD >8	45
Anxiety	33
Depression	16
PTSD test positive	3
Pfiffer test >3	21
Duke test <33	

Table 3. Pain analysis Table 4. PICS analysis

Graph 1. NRS versus BPI at 3 month follow-up

CONCLUSIONS

This is the first study that evaluates pain level at ICU discharge and its subsequent evolution. Results suggest an increase in the incidence of chronic pain and also of neuropathic pain with differences statistically significant. Anxiety, depression and PTSD are presented in these patients. A higher interference in the activities of daily life owing to higher pain level has been identified in patients. Patients also have a perception of worse health . Therefore, the inclusion of chronic pain in the definition of Post Intensive Care Syndrome should be considered.

References

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