

## Grupo neurocríticos

### Publicaciones y proyectos de investigación en los últimos 6 años:

#### A) Publicaciones:

1. Guardiola B, Planella M, Ferreruela M, Velasco J, Pérez-Bárcena J, Llompart-Pou JA. Brain injury secondary to lightning strike. *Med Intensiva*. 2012. S0210- 5691(12)00282-3. 10.1016
2. Llompart-Pou JA, Raurich JM, Ayestarán I, Pérez-Bárcena J. Wake-up test and stress hormone levels in patients with brain injury: a focus on mechanisms involved. *Crit Care Med*. 2012 40(6):2002; author reply 2002-3.
3. Llompart-Pou JA, Fernández-de-Castillo AG, Burguera B, Pérez-Bárcena J, Marsé P, Rodríguez-Yago M, Barceló A, Raurich JM. Stress hyperglycaemia in critically ill patients: potential role of incretin hormones; a preliminary study. *Nutr Hosp*. 2012. 27(1):130-7.
4. Efficacy of the dipeptide N(2)-L-Alanyl-L-glutamine in traumatic patients admitted to the ICU: a prospective, randomized, double-blind, multicentre study. Pérez- Bárcena J, Marsé P, Cervera M, Frontera G, Llompart-Pou JA, Raurich JM, García de Lorenzo A. *Nutr Hosp*. 2012 . 27(1):116-22. Spanish.
5. Correlation between TLR2 and TLR4 levels and adrenal gland response in trauma patients. Llompart-Pou JA, Pérez-Bárcena J, Marsé P, Pérez G, Bengoechea JA, Raurich JM. *Med Intensiva*. 2012. 36(8):590-592.
6. Llompart-Pou JA, Abadal JM, Rayo L, Pérez-Bárcena J. Comment on "Noninvasive detection of elevated intracranial pressure using a portable ultrasound system". *Am J Emerg Med*. 2012. 30(1):244-5; author reply 245.
7. Potential effects of corticosteroids on physiological dead-space fraction in acute respiratory distress syndrome. Raurich JM, Ferreruela M, Llompart-Pou JA, Vilar M, Colomar A, Ayestarán I, Pérez-Bárcena J, Ibáñez J. *Respir Care*. 2012. 57(3):377-83
8. Response to the high-dose corticotrophin stimulation test depends on plasma adrenocorticotropin hormone levels in septic shock. Llompart-Pou JA, Raurich JM, Ayestarán I, Fernández-de-Castillo AG, Pérez-Bárcena J, Ibáñez J. *J Crit Care*. 2012. 27(3):276-82.

9. Long-term follow-up of patients with post-traumatic refractory high intracranial pressure treated with lumbar drainage. Llompart-Pou JA, Abadal JM, Pérez- Bárcena J, Molina M, Brell M, Ibáñez J, Raurich JM, Ibáñez J, Homar J. *Anaesth Intensive Care*. 2011. 39(1):79-83.
10. Pérez-Bárcena J, Goedhart P, Ibáñez J, Brell M, García R, Llinás P, Jiménez C, Ince C. Direct observation of human microcirculation during decompressive craniectomy after stroke. *Crit Care Med*. 2011. 39(5):1126-9.
11. Lack of effect of glutamine administration to boost the innate immune system response in trauma patients in the intensive care unit. **Pérez-Bárcena J**, Crespí C, Regueiro V, Marsé P, Raurich JM, Ibáñez J, García de Lorenzo-Mateos A, Bengoechea JA. *Crit Care*. 2010;14(6):R233.
12. Lack of correlation among intracerebral cytokines, intracranial pressure, and brain tissue oxygenation in patients with traumatic brain injury and diffuse lesions. **Pérez-Bárcena J**, Ibáñez J, Brell M, Crespí C, Frontera G, Llompart-Pou JA, Homar J, Abadal JM. *Crit Care Med*. 2011. 39(3):533-40.
13. Correlation between brain interstitial and total serum cortisol levels in traumatic brain injury. A preliminary study. Llompart-Pou JA, Pérez G, Pérez-Bárcena J, Brell M, Ibáñez J, Riesco M, Abadal JM, Homar J, Marsé P, Ibáñez J, Burguera B, Raurich JM. *J Endocrinol Invest*. 2010. 33(6):368-72.
14. Loss of cortisol circadian rhythm in patients with traumatic brain injury: a microdialysis evaluation. Llompart-Pou JA, Pérez G, Raurich JM, Riesco M, Brell M, Ibáñez J, Pérez-Bárcena J, Abadal JM, Homar J, Burguera B. *Neurocrit Care*. 2010. 13(2):211-6.
15. Prognostic value of the pulmonary dead-space fraction during the early and intermediate phases of acute respiratory distress syndrome. Raurich JM, Vilar M, Colomar A, Ibáñez J, Ayestarán I, Pérez-Bárcena J, Llompart-Pou JA. *Respir Care*. 2010. 55(3):282-7.
16. Expression of toll-like receptors 2 and 4 is upregulated during hospital admission in traumatic patients: lack of correlation with blunted innate immune responses. Pérez-Bárcena J, Regueiro V, Crespí C, Pierola J, Oliver A, Llompart-Pou JA, Ayestarán JI, Raurich JM, Marsé P, Ibáñez J, Bengoechea JA. *Ann Surg*. 2010 Mar;251(3):521-7.
17. Expression of toll-like receptors 2 and 4 is upregulated during hospital admission in traumatic patients: lack of correlation with blunted innate immune responses. Pérez-Bárcena J, Regueiro V, Crespí C, Pierola J, Oliver A, Llompart-Pou JA, Ayestarán JI, Raurich JM, Marsé P, Ibáñez J, Bengoechea JA. *Ann Surg*. 2010 Mar; 251(3):521-7.

18. Correlation between brain interstitial and total serum cortisol levels in traumatic brain injury. A preliminary study. Llompart-Pou JA, Pérez G, Pérez-Bárcena J, Brell M, Ibáñez J, Riesco M, Abadal JM, Homar J, Marsé P, Ibáñez J, Burguera B, Raurich JM. *J Endocrinol Invest*. 2010 Jun; 33(6):368-72.
19. Loss of cortisol circadian rhythm in patients with traumatic brain injury: a microdialysis evaluation. Llompart-Pou JA, Pérez G, Raurich JM, Riesco M, Brell M, Ibáñez J, Pérez-Bárcena J, Abadal JM, Homar J, Burguera B. *Neurocrit Care*. 2010 Oct; 13(2):211-6.
20. Prognostic value of the pulmonary dead-space fraction during the early and intermediate phases of acute respiratory distress syndrome. Raurich JM, Vilar M, Colomar A, Ibáñez J, Ayestarán I, Pérez-Bárcena J, Llompart-Pou JA. *Respir Care*. 2010 Mar; 55(3):282-7.
21. Lumbar drainage for intracranial pressure. Abadal JM, Llompart-Pou JA, Homar J, Molina M, Pérez-Bárcena J. *J Neurosurg*. 2009 Dec; 111(6):1295; author reply 1295-6.
22. Study of a brain microcirculation in cranioencephalic trauma using the Side Stream Field (SDF) system. Pérez-Bárcena J, Ibáñez J, Brell M, Llinás P, Abadal JM, Llompart-Pou JA. *Med Intensiva*. 2009 Jun-Jul; 33(5):256-9. Spanish.
23. Contrast-enhanced transcranial color sonography in the diagnosis of cerebral circulatory arrest. Llompart-Pou JA, Abadal JM, Velasco J, Homar J, Blanco C, Ayestarán JI, Pérez-Bárcena J. *Transplant Proc*. 2009 Jun; 41(5):1466-8.
24. Incidence and outcome of ischemic hepatitis complicating septic shock. Raurich JM, Pérez O, Llompart-Pou JA, Ibáñez J, Ayestarán I, Pérez-Bárcena J. *Hepatol Res*. 2009 Jul; 39(7):700-5. Epub 2009 Mar 15.
25. Intravascular cooling for rapid induction of moderate hypothermia in severely headinjured patients: results of a multicenter study (IntraCool). Sahuquillo J, Pérez-Bárcena J, Biestro A, Zavala E, Merino MA, Vilalta A, Poca MA, Garnacho A, Adalia R, Homar J, Llompart-Pou JA. *Intensive Care Med*. 2009 May; 35(5):890-8. Epub 2008 Nov 26.
26. Pentobarbital versus thiopental in the treatment of refractory intracranial hypertension in patients with traumatic brain injury: a randomized controlled trial. Pérez-Bárcena J, Llompart-Pou JA, Homar J, Abadal JM, Raurich JM, Frontera G, Brell M, Ibáñez J, Ibáñez J. *Crit Care*. 2008; 12(4):R112. Epub 2008 Aug 29.

27. Acute Hypothalamic-pituitary-adrenal response in traumatic brain injury with and without extracerebral trauma. Llopart-Pou JA, Raurich JM, Pérez-Bárcena J, Barceló A, Ibáñez J, Ayestarán JI. *Neurocrit Care*. 2008; 9(2):230-6.
28. Ultrasonographic cerebral perfusion in assessment of brain death: a preliminary study. Abadal JM, Llopart-Pou JA, Homar J, Velasco J, Ibáñez J, Pérez-Bárcena J. *J Ultrasound Med*. 2008 May; 27(5):791-4.
29. Glutamine as a modulator of the immune system of critical care patients: effect on Toll-like receptor expression. A preliminary study. Pérez-Bárcena J, Regueiro V, Marsé P, Raurich JM, Rodríguez A, Ibáñez J, de Lorenzo Mateos AG, Bengoechea JA. *Nutrition*. 2008 Jun; 24(6):522-7. Epub 2008 Mar 26.
30. Applications of transcranial color-coded duplex sonography in monitoring neurocritical patients. Abadal JM, Llopart-Pou JA, Homar J, Pérez-Bárcena J, Ibáñez J. *Med Intensiva*. 2007 Dec; 31(9):510-7. Review. Spanish.
31. Cerebral hemodynamics in patients with traumatic brain injury evaluated by transcranial Doppler and transcranial color coded sonography. A comparison study. Homar J, Abadal JM, Llopart-Pou JA, Pérez-Bárcena J, Ibáñez J. *Neurocirugia (Astur)*. 2007 Jun; 18(3):221-6. Spanish.
32. Effect of barbiturate coma on adrenal response in patients with traumatic brain injury. Llopart-Pou JA, Pérez-Bárcena J, Raurich JM, Burguera B, Ayestarán JI, Abadal JM, Homar J, Ibáñez J. *J Endocrinol Invest*. 2007 May; 30(5):393-8.
33. Relationship between plasma adrenocorticotropin hormone and intensive care unit survival in early traumatic brain injury. Llopart-Pou JA, Raurich JM, Ibáñez J, Burguera B, Barceló A, Ayestarán JI, Pérez-Bárcena J. *J Trauma*. 2007 Jun; 62(6):1457-61.
34. Early non-invasive diagnosis of posttraumatic carotid-cavernous fistula diagnosed by transcranial color-coded duplex sonography: analysis of 4 patients. Llopart-Pou JA, Abadal JM, Pérez-Bárcena J, Homar J, Rodríguez A, Ibáñez J. *Med Intensiva*. 2007 Jan-Feb; 31(1):46-9. Spanish.
35. Neurologic outcome of posttraumatic refractory intracranial hypertension treated with external lumbar drainage. Abadal-Centellas JM, Llopart-Pou JA, Homar-Ramírez J, Pérez-Bárcena J, Rosselló-Ferrer A, Ibáñez-Juvé J. *J Trauma*. 2007 Feb; 62(2):282-6; discussion 286.

## **B) Proyectos Financiados:**

“Eficacia del dipéptido n(2)-L-Alanil-glutamina en los pacientes traumáticos ingresados en la UCI: estudio prospectivo, multicéntrico, aleatorizado y doble ciego”. 2010. Financiado por Ministerio Sanidad, Código TRA-132.

“Venticute® (rSP-C Surfactant) in patients with pneumonia or aspiration of gastric contents leading to intubation, mechanical ventilation and severe oxygenation impairment (VALID study)”. Co-IP: Dr. Llompart-Pou

“CONSCIOUS-2. A prospective, multi-center, double-blind, randomized, placebocontrolled, parallel-group study to asses the efficacy and safety of clazosentan in reducing vasospasm-related morbidity and all-cause mortality in adult patients with aneurysmal subarachnoid hemorrhage treated by surgical clipping”. Co-IP: Dr. Llompart-Pou

“Use of endovascular cooling methods to induce moderate fast hypothermia (32-33°C) and controlled rewarming in patients with traumatic brain injury and refractory intracranial pressure. Multicenter pilot study to evaluate feasibility, safety and efectiveness (Intracool). Protocol N°: IVHY-2002. Co-IP: Dr. Llompart-Pou

“PROWESS-SHOCK. Efficacy and safety of Dotrecogin alfa (activated) in adult patients with septic shock (F1K-MC-EVDP)”. Co-IP: Dr. Llompart-Pou “A Randomised, Double-blind, Placebo-Controlled, Dose Escalation Study to investigate the safety and pharmacokinetics alter single and multiple doses of SLV334 in sequential cohorts of patients with moderate and severe traumatic brain injury”. Protocol S334.2.002. Co-IP: Dr. Llompart-Pou

“CONSCIOUS-3. Clazosentan to overcome neurological ischaemia infarction occurring after subarachnoid hemorrhage. Protocol AC-504-302. Co-IP: Dr. Llompart-Pou

“SyNAPSe. A randomized, doublé-blind, placebo-controlled phase 3 study to investigate the efficacy and safety of progesterone in patients with severe traumatic brain injury”. Protocol BHR-100-301. Co-IP: Dr. Llompart-Pou