

Original tool for monitoring brain-damaged patients depending on the therapeutic care



Context:

Each year, 155 000 patients are admitted in French hospitals for traumatic brain injury (TBI); among these patients, 8 500 have serious brain lesions, leading to disabling damages. A quick and efficient test is needed to explore gravity and evolution of cerebral lesions. Some Gravity scores already exist but none of them take into account simultaneously the gravity and the evolution of brain damages depending on the intensity of therapeutic care.

Technology:

This gravity score uses on the one hand, parameters validated by international experts in the field of brain injury and on the other hand, a really original graphic representation which can be visualized in real-time on a monitor screen. Items and graphic representation enable an instant interpretation of gravity and evolution of vital status of the patient depending on the therapeutic management intensity.

Stage of development:

Proof-of-concept and validation: The concept of the Gravity score has been tested and strongly validated in a 250 adults cohort with severe TBI admitted in intensive care units. All parameters during the first 7 days and outcomes, including hospital mortality and long term disability at 3 years, were recorded and analyzed. Assessment of nurse and resident “reactivity” prior and after the introduction of the visual presentation were performed giving an easily adherence to the concept and increasing real-time decision-making.

Advantages / Novelty:

This new solution, with Gravity score and Visual representation including initial gravity and evolution with the intensity of care, represents an efficient way to organize and facilitate the interaction between the monitoring and the care team in brain injury patients.

Intellectual Property:

The Assistance Publique – Hôpitaux de Paris (AP-HP) has filed a patent on this new score.

Partners:

Looking for cooperation in development and commercialization through license agreement.

Ref AP-HP 13-038

Keywords:

Brain-damaged patients
- Score & Diagnostic -
Original graphic
presentation

Intellectual property:

FR13/57846 (A1) –
Priority date: August
7th, 2013

Inventors: Dr Fabrice
VALLEE and Dr
Joaquim MATEO (AP-
HP, Lariboisière
Hospital, Paris)

Stage of development:

Proof of concept done



Contacts:

Elodie Acloque
33 (0) 1 40 27 55 52

Benoît Labarthe
33 (0) 1 44 84 17 18

licensing.ottpi@drc.aphp.fr

Fax : 33 (0) 1 44 84 17 00