

Category :**Brain: Neurologic disease**

**A266 - Timing of invasive intracranial pressure monitoring between neurosurgeons and intensive care physicians (timing-icp)**

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### **Introduction:**

Prolonged Intracranial Hypertension (ICH) has been related to poor outcome [1].

Placement of an intracerebral catheter represents the gold standard technique for Intracranial pressure (ICP) invasive monitoring. This maneuver has usually been performed by neurosurgeons, but recently this procedure has more often been carried out by intensivists, at the bedside [2].

Preliminary retrospective data suggest that ICP catheter placement performed by trained intensivists can be a safe procedure which can be carried out faster than the one performed by neurosurgeons, with a similar incidence of complications. The aim of this observational, prospective and multicentric study is to compare timing of invasive ICP monitoring performed by intensivist and neurosurgeons and to detect differences in the incidence of complications.

### **Methods:**

We are including all adults with acute cerebral pathology and urgent indication to invasive ICP monitoring in 16 different centers in Italy. Exclusion criteria are represented by significative coagulation disorders, not urgent request, need for intracranial catheter placement other than ICP monitoring.

Timing of ICP probe positioning will be analyzed as follows: T0 represents time in which ICH development is suspected, T1 represents time when indication to ICP monitoring is stated and T2 is the time in which skin incision is performed.

Incidence of catheter-related intracranial bleedings, meningitis related to procedure and wrong positioning of catheter and/or its malfunction will be also registered.

### **Results:**

This study was registered on ClinicalTrial.gov. Centers are enrolling patients.

### **Conclusion:**

Despite all efforts, Intracranial Hypertension is still a worldwide medical issue. TIMING-ICP may allow us to assess if ICP monitoring placement by intensivists can be a time-saving procedure compared to neurosurgical one and equally safe.

### **References:**

[1] Vik A et al. J Neurosurg 109(4):678-84, 2008

[2] Ehtisham A et al. Neurocrit Care 10(2):241-7, 2009