

### LETTER TO EDITOR

# Comment on the Newly Developed Consciousness Assessment Scale; AVPU Plus

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I read with interest a recent paper in your journal, in which three consciousness assessment scales were compared in poisoned patients and finally a new scale "AVPU plus" was proposed (1). The study was very interesting with a worthy objective. I would like to admire the authors for exploring how the Alert/Verbal/Painful/Unresponsive (AVPU) responsive scale corresponds with the Glasgow Coma Scale (GCS) and Richmond Agitation-Sedation Scale (RASS) scores in drugpoisoned patients, and for proposing an augmented AVPU scale.

The GCS was developed by Teasdale and Jennet in 1974 (2), aimed at standardizing assessment of level of consciousness in head trauma victims (3). The AVPU scale has been developed for rapid neurologic assessment of

**Table 1.** Comparison of the original and the proposed grading for AVPU (+) scale

Clinical parameter	Original grading	Proposed grading
Alert & Calm	AC	$1_a$
Alert & Restless	AR	1ь
Alert & Drowsy	AD	$1_{\rm c}$
Verbal & Calm	VC	$2_{\rm a}$
Verbal & Restless	VR	$2_{b}$
Verbal & Agitated	VA	$2_{\rm c}$
Verbal & Drowsy	VD	$2_{d}$
Verbal & Lightly Sedated	VLS	$2_{\rm e}$
Verbal & Moderately Sedated	VMS	$2_{\mathrm{f}}$
Painful & Agitated	PA	$3_a$
Painful & Deeply Sedated	PS	3 <sub>b</sub>
Unresponsive & Combative	UC	$4_a$
Unresponsive & Highly Agitated	UA	$4_{\rm b}$
Unresponsive & Unarousable	UU	$4_{\rm c}$

traumatic patients and for those in need of advanced life support (1,4). RASS has been developed to assess agitation-sedation status of critical patients in intensive care unit (5,6).

Because there has been no standardized unified method for assessment of consciousness impairment in patients with drug and chemical poisoning, physicians have used different methods or scales in different medical settings. Therefore, developing a research-based scale that is agreed among most medical toxicologists seems necessary. My colleagues and I usually use the AVPU scale in our routine practice. Nonetheless, looking at this newly proposed scale, we believe using AVPU plus for poisoned patients in emergency setting or clinical toxicology ward would be helpful and practical. As a recommendation, I think if the grading of AVPU plus is scaled in numerical instead of alphabetical, it would be easier to use (Table 1).

## Conflict of interest: None to be declared.

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