Comprehensive oral-health assessment of patients with brain injury in neuro-rehabilitation setting

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Background
Motor, sensory, perceptual and cognitive deficit are common after brain injury
Three dimensions of oral self care: Function, education and training, and compliance
Oral health deteriorated by increased accumulation of dental plaque and colonization by respiratory pathogens
The condition most commonly associated with systemic diseases is periodontitis (Fig. 1)

Aims
The objective of this pilot study was to perform
1) Clinical oral health assessment
2) Oral-health-related social and behavioral aspects, in acquired brain injury (ABI) patients

Materials and methods
• Thirteen ABI patients (37.5 ± 3.9 years)
• Social and behavioral history
• Bed-side oral examination score (BOE) (Fig. 2)
• Full mouth clinical examination:
  o Periodontal status (plaque, bleeding, clinical attachment levels) (Fig. 1)
  o Tooth condition (Decay, filled, missing)
• Microbiological examination
•Extent and severity of periodontal disease

Conclusions
ABI patients had a poor status across a range of oral-, dental-, and periodontal-related parameters
BOE provides a narrative and visual reference, useful tool to reinforce and sustain the assessment practice
Access to professional oral health care is not limited to "Rx per se" but also to the motivation and instructions to the patients
Structured studies are required to define evidence-based approaches for such clinical reality