

Letter to the Editor: Clinical Signs of Impending Death, A Retrospective Descriptive Analysis

Carta ao Editor: Sinais de Morte Iminente, Uma Análise Retrospectiva e Descritiva

Keywords: Death; Terminal Care

Palavras-chave: Cuidados Terminais; Morte

The agonic phase is a physiological and expected state that precedes the last days or hours of life of terminally-ill patients presenting multiple signs of impending death (SID) due to multiorgan failure affecting neurocognitive, cardiovascular, respiratory and muscular functions.¹

The bedside clinical identification of SID has a profound impact on patients, families and health care professionals¹. It can interfere with effective communication with patients and loved ones and also with complex end-of-life decisions such as aggressive and disproportionate treatments, discharge planning and enrolment on clinical care pathways.^{2,3} Despite the apparent medical understanding that death is a process and not an isolated event, the existing evidence on the frequency and identification of SID in the last days or hours of life is sparse.²

Since we were aware of the importance of such an identification, we proposed to review the frequency of SID in patients accompanied by our multidisciplinary home-based palliative care team, between December 2018 and July 2019. Therefore, we performed a retrospective descriptive analysis of the bedside SID in the last 24 hours of life of terminally ill patients, anonymously registered in our database. Of the 60 records, 26 were excluded for not having

Table 1 – Patients sociodemographic and clinical characteristics and frequency of impending death signs (n = 34)

Male, n (%)	23 (67.6)
Age, years; mean (SD)	71.4 (11.8), range 50 – 93
Cancer diagnosis, n (%)*	31 (91.2)
Agonic phase duration, hours; mean (SD)	56.3 (42.7), range 24 – 168
Frequency of SID, n (%)	
Dysphagia†	24 (70.5)
PPS ≤ 20†	21 (61.7)
Death rattle‡	20 (58.8)
Decreased level of consciousness†	18 (52.9)
Cheyne-Stokes respiration‡	17 (50.0)
Livedo reticularis/peripheral cyanosis‡	16 (47.0)
Decreased or absent urinary output‡	14 (41.1)
Drooping of nasolabial fold‡	11 (32.3)
Fetor hepaticus‡	11 (32.3)
Delirium‡	7 (20.5)

PPS: palliative performance status; SD: standard deviation; SID: signs of impending death. *Brain: n = 2; breast: n = 2; colorectal: n = 6; haematological: n = 1; kidney: n = 2; lung: n = 6; pâncreas: n = 2; prostate: n = 3; stomach: n = 7. †Early SID^{1,4}. ‡Late SID^{1,4}.

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registered any SID, leaving a final number of 34 patients analyzed. The patients' clinical and demographic characteristics are presented in Table 1. We identified ten registered impending death signs: dysphagia; death rattle; the palliative performance status (PPS); decreased level of consciousness; Cheyne-Stokes respiration; *livedo reticularis*/peripheral cyanosis; decreased or absent urinary output; drooping of the nasolabial fold; *fetor hepaticus* and *delirium* (Table 1). The most frequently recorded signs were: dysphagia (70.5%); PPS ≤ 20 (61.7%); death rattle (58.8%); decreased level of consciousness (52.9%) and Cheyne-Stokes respiration (50.0%).

The identification of bedside SID can assist clinicians in making the diagnosis of impending death, which is of utmost importance in order to minimize aggressive interventions, establishing appropriate and dignified goals of care and optimizing the quality of life of patients and those accompanying them. Although only 34/60 patients had registered SID, our results show an identification of both early and late SID, which contradicts the existing literature that shows that late signs of impending death are less frequently clinically identified and registered.² We are aware, having analysed the data, that it is difficult to identify and/or register SID in the team's clinical practice. This paves the way to future training opportunities concerning this clinical skill, in order to provide better care to terminally ill patients and their caregivers.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

CONFLICTS OF INTEREST

All authors report no conflict of interest.

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