FAST FACTS AND CONCEPTS #392
PHYSICAL EXAMINATION OF THE DYING PATIENT
Henry Schneiderman MD MACP, Sean Marks MD

Background: What components of the physical examination (PE) are valuable when providing comfort-focused care for an imminently dying patient? While patient factors must be individualized, this Fast Fact assimilates the sparse published evidence along with anecdotal experience to offer clinical pearls on how to tailor the PE.

Rationale for an attentive PE for the dying: Naturally, many clinicians wish to avoid imposing on the dying patient (1). Yet, PE routinely provides practical clinical information for prognosis and symptom assessment, which may improve communication and decision-making regarding palliative therapies, disposition, and whether family members wish to remain at bedside (2). Furthermore, “the laying-on of hands” also can convey attentiveness, comfort, clinician engagement, and non-abandonment (1).

Prognostic Value: For centuries, experts have been searching for PE signs that predict imminence of death (3-5). Recent prospective studies in terminal cancer patients (6-9) have correlated specific clinical signs with death in < 3 days. Five highly specific signs are loss of radial pulse; mandibular movement during breathing; anuria; Cheyne-Stokes breathing; and the “death rattle” from excessive oral secretions (see Fast Fact # 109) (6). Yet, only about half of the studied patients displayed any of these 5 signs (low sensitivity). So, while their presence may correlate with death within 3 days, their absence does NOT permit the opposite conclusion. Neurologic and neuro-muscular signs that have been correlated with death within three days include non-reactive pupils; decreased response to verbal/visual stimuli; inability to close the eyelids; drooping of both nasolabial folds (face may appear more relaxed); neck hyperextension (head tilted back when supine); and grunting of vocal cords, chiefly on expiration (6-7). Decreased performance status, dysphagia, and decreased oral intake constitute more commonly encountered, “early” clinical signs suggesting a prognosis of 1-2 weeks or less (6).

Step by step examination: Encourage family to stay at bedside during the PE so you can explain findings in lay-person language during the process, to foster engagement and education. The following is not a comprehensive list, but rather compiles targeted elements, in addition to the aforementioned signs.

General appearance (9,10): Does the patient interact with his or her environment? Is there a malodor which could suggest gangrene, anerobic infection, uremia, or hepatic failure? Is the body athwart the bed? Would adjustment of head position, trunk or limbs ease muscle tension, discomfort or dyspnea?

Vital signs: Imminent death has been correlated with varying blood pressure, tachypnea (respiratory rate >24), tachycardia, inappropriate bradycardia, fever, and hypothermia (6).

Skin: Evaluate for peripheral cyanosis which is strongly correlated with imminent death or proximal mottling (e.g. knees) which hints at approaching death (6-8). Examine the sacrococcyx during nursing care to demonstrate shared concern for keeping skin dry and clean and to identify the Kennedy Terminal Ulcer or other signs of skin failure that herald approaching death as appropriate (Fast Fact #383) (11,12).

HEENT: Drooping eyelids or a bilateral facial droop may suggest imminent death, and an acetone or musky smell is common. Provide additional care such as artificial tear drops or saliva for irritated or dry eyes or lips, especially relevant for patients who are not able to close their eyes (13).

Respiratory: Evaluate the breathing pattern: apneic pauses, Cheyne-Stokes respirations, and deep, labored rapid breaths (Kussmaul respirations) are associated with imminent death (6-9). Nebulizers may treat symptomatic wheezing. The Respiratory Distress Observation Scale is a validated tool to identify when respiratory distress could benefit from as-needed intervention(s) in those who cannot report dyspnea (14). It involves a manual check of the respiratory rate for 30-60 seconds and assessments for restlessness, accessory muscle use, grunting at end-expiration, nasal flaring, and a generalized look of fear (14).

Cardiovascular: Unless peripheral pulses are impalpable and one seeks rate and rhythm, listening to the heart may not always be warranted. Evaluate distal extremities, especially the toes (the “end of the oxygen railway”) for insight into perfusion and volume status. Edema severity can guide the use of diuretics and artificial hydration.
Abdomen: If only the briefest survival is expected, a targeted exam to assess for bowel sounds, distention, and the presence of uncomfortable ascites can sufficiently guide the bowel regimen and ascites management.

Rectal/genital: Indications for these examinations are uncommon, but may include concern for fecal impaction, scrotal edema, bladder fullness, or genital skin infections (15).

Musculoskeletal: Change position or replace a pillow if the neck appears cramped. Painful spasms or excess tonus may be treated with a benzodiazepine, muscle-relaxant, topical heat, or massage.

Neurologic and neuromuscular: Myoclonus (16,17) or seizure could suggest the need for a rescue benzodiazepine and/or the presence of opioid-induced neurotoxicity (see Fast Facts #57 and/or 58); but these are not strong predictors of imminent death (6-8). Observing spontaneous limb movement and face symmetry takes but a moment. Mid-size pupils strongly suggest that obtundation is due to imminence of death rather than a pharmacologic origin – this may comfort a concerned family member. Large and asymmetrically nonreactive pupils may be a dire warning for imminent death from brain herniation.

Mental status: Evaluate delirium and prognosis via a targeted assessment of the level of consciousness, affective state, and sensorium. Performing a full mini-mental status evaluation or the Glasgow Coma Scale may not be necessary as their utility has not been proven in the imminently dying (18).

Extracorporeal: Evaluate for significant decreases in urine output. A meconium-like stool odor has been associated with imminent death in dementia populations (19). Askew nasal oxygen prongs should trigger a gentle offer to restore them and to peek behind the ears and at the bridge of the nose for signs of early skin breakdown contributing to deliberate removal. Can the cardiac monitor be discontinued or placed on silent/remote monitoring mode so that, even if family insists it be there, they are not tormented watching for the last heartbeat?

References

Conflicts of Interest: None

Author Affiliations: University of Connecticut School of Medicine; Quinnipiac University School of Medicine; Saint Francis Hospital/Trinity Health Of New England, Hartford, CT; Medical College of Wisconsin, Milwaukee, WI.

Version History: first electronically published in February 2020

Fast Facts and Concepts are edited by Sean Marks MD (Medical College of Wisconsin) and associate editor Drew A Rosielle MD (University of Minnesota Medical School), with the generous support of a volunteer peer-review editorial board, and are made available online by the Palliative Care Network of Wisconsin (PCNOW); the authors of each individual Fast Fact are solely responsible for that Fast Fact’s content. The full set of Fast Facts are available at Palliative Care Network of Wisconsin with contact information, and how to reference Fast Facts.

Copyright: All Fast Facts and Concepts are published under a Creative Commons Attribution-NonCommercial 4.0 International Copyright (http://creativecommons.org/licenses/by-nc/4.0/). Fast Facts can only be copied and distributed for non-commercial, educational purposes. If you adapt or distribute a Fast Fact, let us know!

Disclaimer: Fast Facts and Concepts provide educational information for health care professionals. This information is not medical advice. Fast Facts are not continually updated, and new safety information may emerge after a Fast Fact is published. Health care providers should always exercise their own independent clinical judgment and consult other relevant and up-to-date experts and resources. Some Fast Facts cite the use of a product in a dosage, for an indication, or in a manner other than that recommended in the product labeling. Accordingly, the official prescribing information should be consulted before any such product is used.