

A Review and A Case

Collection On Terminal Lucidity

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ABSTRACT

Terminal lucidity, the unexpected return of mental clarity and memory shortly before death in patients with severe psychiatric and neurological disorders, has been documented in medical literature for over 250 years but remains largely overlooked. In this review, we examine a variety of terminal lucidity cases to encourage further investigation into the underlying mechanisms and their potential implications for understanding memory and cognition at the end of life, as well as for advancing treatments for terminal illnesses. Reported cases include patients affected by brain abscesses, tumors, strokes, meningitis, dementia, Alzheimer's disease, schizophrenia, and mood disorders. Notably, several accounts suggest that during episodes of terminal lucidity, cognitive and memory functions may operate through neurological processes distinct from those of the typical brain. We propose that in-depth study of terminal lucidity could yield valuable insights into memory and cognitive processing and inform the development of new therapeutic approaches. Additionally, greater awareness of these unusual end-of-life experiences may better equip physicians, caregivers, and bereaved families to recognize and cope with such events.

Key Words:

Brain Abscesses, Tumours, Dementia, Alzheimer's Disease.

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1.INTRODUCTION

Terminal lucidity (also known as rallying, terminal rally, the rally, end-of-life-experience¹, energy surge, the surge, or pre-mortem surge⁽²⁾) is an unexpected return of consciousness, mental clarity, or memory shortly before death in individuals with severe psychiatric or neurological disorders. It has been reported by physicians since the 19th century. Terminal lucidity is a narrower term than the phenomenon paradoxical lucidity where return of mental clarity can occur anytime (not just before death⁽³⁾⁽⁴⁾). However, as of 2025, terminal lucidity is

not considered a medical term and there is no official consensus on the identifying characteristic

⁽⁵⁾ Terminal

lucidity is a poorly understood phenomenon in the context of medical and psychological research, and there is no consensus on what the underlying mechanisms are. It can occur even in cases of severe, irreversible damage or degeneration to the brain, making its existence a challenge to the irreversibility paradigm of degenerative dementia. ⁽⁶⁾

Studying terminal lucidity presents ethical challenges due to the need for informed consent. Care providers also face ethical challenges of whether to provide deep sedation, which might limit terminal lucidity, and how to respond to requests for a change in care plans from family members. ⁽⁷⁾

2.Key Points About Terminal Lucidity:

Brief and Unexpected:

Terminal lucidity typically occurs suddenly and lasts for a short time — often just a few hours or, in rare cases, a day or two.

Temporary Return of Abilities:

Individuals may temporarily regain abilities they had lost, such as speaking, recognizing loved ones, or recalling past memories.

Unpredictable Occurrence:

Not everyone nearing the end of life will experience terminal lucidity, and it's impossible to predict when or if it will happen.

A Sign of Approaching Death, Not Recovery:

While emotionally powerful for families and caregivers, terminal lucidity signals that death is near and should not be mistaken for a sign of improvement or recovery. ⁽⁸⁾

3. Signs of terminal lucidity

During terminal lucidity, a person may momentarily reconnect with their surroundings and engage with others in ways that their illness had long made difficult. These episodes can last anywhere from a few minutes to several hours. When a loved one experiences terminal lucidity, they might:

- Respond to family and friends after a period of withdrawal
- Speak clearly after previously being unable to communicate
- Express simple needs or desires, such as asking for a drink or a favorite meal
- Recognize familiar faces they had forgotten, like old friends in a photo
- Recall meaningful memories and eagerly share them with others
- Take part in a beloved activity, such as singing or playing an instrument they haven't touched in years

In these brief,

remarkable moments, it can feel as though your loved one has returned to their familiar self. This fleeting clarity offers a precious chance to connect, share words of love and comfort, and experience a meaningful exchange you may have thought was no longer possible.⁽⁹⁾

4.terminal lucidity last

Current research suggests that episodes of terminal lucidity can last anywhere from a few minutes to several hours, and in some cases, up to a few days. One study found that over 90% of individuals with severe dementia who exhibited terminal lucidity passed away within seven days, with 41% dying within 1–2 days, and 15% within just two hours. However, further research is needed to fully understand the timing and significance of this phenomenon. For families and caregivers, terminal lucidity can be emotionally complex. The sudden return of clarity may offer hope that their loved one is improving, even though it often signals that death is near. Greater awareness and research into terminal lucidity could help families cherish these final moments while gently preparing for the loss ahead.

Facing the death of a loved one is never easy, especially when the timeline is uncertain. Families of individuals with dementia often live with an ongoing sense of ambiguity about when and how death will occur. While people with Alzheimer's disease may live 4–8 years, and in some cases up to 20 years after diagnosis, studies have shown that more than a third of bereaved caregivers still felt unprepared when the end came — leaving them more vulnerable to anxiety, depression, and complicated grief.

Recognizing episodes of terminal lucidity can offer an opportunity for families to begin the emotional process of saying goodbye. Evidence suggests there may be a connection between these brief moments of clarity and approaching death. Although each person copes with loss differently, certain steps may help families feel more emotionally prepared and present during their loved one's final days. These may include : Acknowledging that death is near Organizing important financial, legal, medical, and insurance matters Saying meaningful goodbyes Offering their loved one permission to let go when they are ready These actions can bring a sense of peace to both the dying and those left behind, easing the transition during this profoundly difficult time.⁽¹⁰⁾

5.Case reports of terminal lucidity

Brain abscesses

Case 1 (1822):

A 6-year-old boy fell onto a nail that pierced his forehead. Over the years, he gradually developed worsening headaches and mental disturbances. By age 17, he was in constant pain, severely melancholic, and experiencing memory loss. He exhibited unusual behavior, including frequent blinking, prolonged fixation on objects, and vivid fantasies. As his condition deteriorated, he began vomiting frequently and was admitted to a hospital, bedridden and unable to sit up. For 18 days, he remained in this state. On the 19th day, he suddenly showed remarkable improvement, claiming to be free of pain and sickness, and expressed plans to leave

the hospital the next day. Tragically, within 15 minutes of the attending physician leaving his room, he fell unconscious and died. An autopsy revealed two large, pus-filled sacs in the frontal part of his brain, each about the size of a hen's egg (Pfeuffer, 1822).

Case 2 (1820):

After her monastery was closed, a nun went to live with her sister. Though she initially seemed to recover from scarlet fever, she soon fell into delirium and became violently insane, obsessively believing the monastery still existed and demanding to return. Despite continuous treatment, her mental state did not improve. She spent three years under the care of a personal nurse in a specially prepared room, regularly visited by her sister. As a chronic fever from a large abscess weakened her, her mental agitation subsided. Three weeks before her death, she became completely lucid, expressed deep gratitude to her sister, recalled her years of insanity, and felt remorseful. She devoutly received the sacrament of the dying and passed away peacefully in her brother-in-law's arms. During the autopsy, her brain was found to be severely swollen, with blood-engorged vessels and soft, edematous tissue that bulged outward when the skull was opened. The dura mater was abnormally fused to the inside of the skull.

Brain tumors

Case 1 (Morse & Perry, 1990):

A 5-year-old boy lay in a coma for three weeks, surrounded almost constantly by his family as he was dying from a malignant brain tumor. On the advice of their minister, the family eventually told the unconscious child that while they would miss him, he had their permission to let go. In a sudden and unexpected moment, the boy regained consciousness, thanked his family for giving him permission to die, and calmly told them he would be leaving soon. He passed away the following day.

Case 2 (Haig, 2007):

A young man in the final stages of lung cancer, which had metastasized to his brain, gradually lost the ability to move or speak. A brain scan shortly before his death revealed that the tumors had not only displaced but destroyed and replaced large areas of brain tissue. Remarkably, about an hour before his death, he regained consciousness, spoke to his family, and said goodbye in a coherent conversation lasting about five minutes. He then fell unconscious again and died soon afterward.

Case 3 (Recent Case):

A 42-year-old investment manager experienced a sudden grand mal seizure one night. Though his initial EEG showed generalized slowing and multiple MRIs appeared normal, a follow-up MRI two months later revealed a plum-sized glioblastoma multiform. By the time of surgery two weeks later, the tumor had doubled in size, and a second tumor had developed in his brain's speech center. After undergoing two surgeries, gamma knife radiation, chemotherapy, and steroid treatments, he was briefly able to return to part-time work. However, the tumor recurred.

Following a failed trial with an experimental oral chemotherapy drug, he chose to stop treatment and entered hospice care at home.

His condition deteriorated rapidly—he became bedridden, blind in one eye, incontinent, incoherent in speech, and exhibited increasingly erratic behavior. He appeared confused, unable to recognize his surroundings, and would slap at family members' touch as if swatting an insect. Eventually, he stopped sleeping, remaining delirious and talking through the night.

Strokes

Case 1 (Noyes, 1952):

A 91-year-old woman had suffered two strokes. The first left her paralyzed on her left side and impaired her speech. Several months later, a second stroke rendered her completely paralyzed and speechless. She was cared for by her daughter. One day, the daughter was startled when the elderly woman suddenly called out. To her amazement, the woman was smiling brightly — her first facial expression since the second stroke. She effortlessly sat up in bed, lifted her arms, and joyfully exclaimed her husband's name in a clear, strong voice. Immediately after, her arms fell, she lay back down, and passed away. It was believed she may have experienced a deathbed vision of her late husband, but what was undeniable was her temporary, remarkable return of bodily control and speech in her final moments.

Case 2 (Daumer, 1865):

In the 19th century, a man who had suffered a severe stroke remained almost completely paralyzed for 11 years and lost his ability to read or speak. Over the next three years, he gradually relearned to recognize familiar faces and understand some speech, but his mental faculties remained limited. A week before his death, he experienced a second stroke. Surprisingly, after this event, he regained nearly full mental clarity. He could once again speak in complete sentences, comprehend extended conversations, and engage meaningfully with others. Though he had been a lifelong atheist, in those final lucid days, he requested the presence of a minister⁽¹¹⁾.

6. Possible Mechanisms

All proposed mechanisms should be considered as anecdotal evidence and hypothetical because there are no neuroscientific studies of terminal lucidity⁽¹²⁾. However, near-death experiences, a related concept to terminal lucidity, can provide insight into possible mechanisms. Near-death experiences have been reported worldwide, independent of culture, by people who unexpectedly recovered from life-threatening injury or by individuals who escaped a potentially fatal situation⁽¹³⁾. People have described their near-death experience as an "out-of-body experience", "sense of unity with nature", "apparent memory of a previous life", etc. Near-death experiences are similar to terminal lucidity because they both occur just before death. There is little research on the mechanism of near-death experiences because it is hard to determine who will experience them. Case reports have found that there is a sudden increase in

brain electrical activity that is normally associated with consciousness in people who are dying due to critical illness. Even though this electrical abnormality could just be cell membrane losing activity because of lack of oxygen, it is possible that the surge of neurophysiological activity before death is related to terminal lucidity.⁽¹⁴⁾

7. Conclusion

Lucidity is a phenomenon that healthcare professionals are still working to understand. It describes the unexpected and temporary return of mental clarity in individuals with severe dementia or other serious neurological conditions shortly before death.

Further research is needed to explore the causes and mechanisms behind terminal lucidity. A deeper understanding could offer new insights into the progression of dementia and potentially lead to new approaches for managing neurodegenerative diseases.

For families and loved ones, terminal lucidity can be emotionally complex. While it may raise false hope of recovery, it can also provide a precious opportunity for meaningful connection and conversation in a person's final moments, helping loved ones begin the process of saying goodbye.⁽¹⁵⁾

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