## Keeping the Patient Alive

Patients who are unconscious due to temporal or permanent impairment of the brainstem are normally kept alive using life support machines. Notably, some patients have full consciousness, while others require intensive management and diagnostic testing. When patients are unconscious, they lose sensational responses and protective reflexes, thus becoming prone to opportunistic diseases and skin ulcers (Ref-A1B2C3). Furthermore, the supporting machine help patients maintain the vitality of other body organs by keeping them working and not repairing the damaged part of the brain. In addition, chances of brain rejuvenating are small; thus, patients remain on the machines for prolonged periods. Whether or not to keep the patient alive is determined by the family members as they hope that their loved ones will regain consciousness.

However, there are ethical considerations or issues which medical personnel and family members believe it is humane to allow the patient to die. The circumstances include when the person’s suffering and agony outweigh the benefit of being alive; thus, allowing the individual to die becomes the best option (Ref-DJ79X2). Additionally, euthanasia is granted when doctors examine the brain and find no activity such as no motor or cranial nerve function, no responsiveness of the pupils, and serum electrolytes functioning. The family members can also agree on the death option if the chances of brain regeneration are minute and the bills or expenses are piling up and suffering emotionally and psychologically.

The different states of unconsciousness mainly include coma where the patient's thalamus or brainstem are damaged, making the patient unresponsive to stimuli such as sound, pain, or touch. In a minimally conscious state (MCS), the patient is intermittently aware of the environment and can respond to the commands such as reacting to pain and moving the eyes. Moreover, in a persistent vegetative state (PVS), the patients exhibit no signs of awareness of themselves, communication, or perception; however, they can breathe, open their eyes, and make involuntary movements on their own (Ref-D4E5F6). Potential risks of long-term brain trauma in the United States may result in a decline in cognitive functioning, sensory and perpetual effects, and impairment of vision and hearing of the patients. The family members also suffer from psychological problems due to fatigue, increased expenses, and burnout when caring for their loved ones.

Examples of real-life studies and testimonials of people who recovered include George Melendez. He got into an accident and suffered from brain trauma which left him minimally conscious as he was occasionally aware of the environment, although unable to make any responses (Ref-DJ49F2). The parents took care of him, and after being given a sleep drug, the zolpidem to ease moaning and thrashing at night, he woke up after four years. Similarly, Sarah Scantlin woke up after 20 years, and her conservations revealed awareness of many things happening around her while in a coma.