

Editorial Desk

Glasgow Coma Scale at 50 and Its Relevance to Organ Donation

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Introduced in 1974 by neurosurgeons Graham Teasdale and Bryan Jennett at the University of Glasgow, the **Glasgow Coma Scale (GCS)** has become one of the most widely used tools in assessing consciousness levels in patients with brain injuries.

As it completes 50 years, the GCS stands as a cornerstone in neurological assessment, especially in intensive care and trauma settings. Its relevance extends far beyond diagnosis and monitoring-it plays a critical role in the **identification of potential organ donors**, a subject of increasing importance in modern medicine.

The GCS provides a standardized method for evaluating a patient's level of consciousness based on three key components: eye opening (E), verbal response (V), and motor response (M). Scores range from 3 (deep coma or death) to 15 (fully alert). Patients with a GCS score of 8 or less are considered to be in a coma and require immediate and intensive medical intervention. In the context of organ donation, a persistently low GCS-especially in cases of severe traumatic brain injury or intracerebral hemorrhage-may be the first clinical sign indicating the potential for brain death.

Brain death, is a key legal and medical criterion for deceased organ donation in many countries, including India. GCS, although not used alone to confirm brain death, is a **crucial early triage tool**. A patient with a GCS of 3, unresponsive to stimuli and showing no brainstem reflexes, becomes a candidate for further brain death testing. This makes the GCS instrumental in identifying possible donors early, allowing time for coordinated care and family counselling. In India, the number of patients admitted with severe neurological injuries has grown exponentially owing to road traffic accidents, strokes, and other traumatic events. Many of these patients do not recover despite optimal medical care. In such scenarios, the GCS maintains **transparency** in neurological assessments and becomes a valuable aid in **initiating the conversation around organ donation**, both within the clinical team and with the patient's family. Timely identification, based in part on GCS, ensures that organ viability is maintained and that the opportunity for donation is not lost.

As we mark 50 years of the Glasgow Coma Scale, it is worth celebrating its impact-not just as a clinical tool but as a bridge between tragedy and hope. By aiding in the early identification of brain-injured patients who may become donors, GCS plays a **quiet yet vital role in saving lives** through organ transplantation. It is a testament to how a simple, well-structured clinical scale can transform critical care and advance the mission of organ donation.

Reference

1.Teasdale G, Jennett B. Assessment of coma and impaired consciousness. A practical scale. Lancet. 1974 Jul 13;2(7872):81-4.

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