

Glasgow coma scale

Introduction

In trauma patients and patients who are critically ill it is important to assess level of consciousness and scoring tools are commonly used to assess level of consciousness. Glasgow coma scale (GCS) is used to assess level of consciousness. This is a quick and oversimplified summary of the components of the GCS.

The GCC

The GCS contains 3 components which are eye opening, verbal response and best motor response. The lowest possible GCS score is 3 and highest possible score is 15. The GCS should be assessed during the primary survey under “**DISABILITY**” component of the ABCDE approach. The suffix **NT** is allocated to any component that is non testable.

Eye opening: 4 – opens eyes spontaneously,
3 – eyes open in to sound,
2 – eyes opened to pressure applied on the nail bed for 10 seconds,
1 – eyes are not opening to any stimuli and
NT – eye opening responses untestable.

Verbal response: 5 Orientated with Person, Place and Month,
4 – confused (speaking phrases and incomplete sentences,
3 – Words only,
2 – Sounds only and
1 – nil verbal response

Best motor response: 6 – Obeys commands (protrudes tongue, grasp finger)
5 – Localizes pain
4 – Normal flexion (Rapid elbow flexion away from the body)
3 – Abnormal flexion (Slow elbow flexion medial towards the body)
2 – Extension (Slow elbow extension)
1 – Nil motor response

EYE OPENING	VERBAL RESPONSE	BEST MOTOR RESPONSE
		
GLARE	COMMENTS	MOBILIZATION
4 – 1	5 – 1	6 – 1

[Glasgow Coma Scale Components. Summarized by S.S.V. Siko](#)

The Glasgow coma scale (Glare, Comments, Mobilization scale) can be objectively used to assess patient's level of consciousness. A poor neurological finding must not be justified by confounding factors, such as alcohol and drugs, until brain injury has been excluded.

GLASGOW COMA SCALE		
EYE OPENING 		E
Opens Spontaneous		4
Eyes open to sound		3
Eyes to pressure (pressure to nailbed for 10 s)		2
Not opening		1
Non-testable		NT
VERBAL RESPONSE 		V
Oriented (Person, Place, Month)		5
Confused (Phrases /incomplete sentence)		4
Words		3
Sounds		2
None		1
Non-testable		NT
BEST MOTOR RESPONSE  CENTRAL STIMULUS • Trapezius pinch 10s • Supraorbital notch 10s		M
Obeys commands (Grasp my finger/ stick out your tongue)		6
Localizing		5
Normal flexion (fast elbow flexion away from body)		4
Abnormal flexion (slow elbow flexion towards body)		3
Extension (slow elbow extension)		2
None		1
Non-testable		NT

Glasgow Coma Scale: Table designed by S.S.V. Siko.

GCS and head injury severity

A GCS 8 is defined as severe brain injury and coma. If there is asymmetrical motor response between left and right it is advised to use the side with the best motor response as it is the best outcome predictor.

BRAIN INJURY SEVERITY		
Severe (Coma)	Moderate	Mild
GCS 3-8	GCS 9-12	GCS 13-15

Other scoring tools

- Full outline of unresponsiveness (**FOUR**) score.

Bibliography

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