

Best Evidence Summaries of Topics in Mental Healthcare

BEST in MH *clinical question-answering service*

Question

“In adults with dementia who have experienced a head trauma, how effective is the Glasgow Coma Scale, compared to other tools, for monitoring neurological status?”

Clarification of question using *PICTRO* structure

<i>Patients:</i>	Patients with dementia
<i>Index Test:</i>	Glasgow Coma Scale
<i>Comparator Test:</i>	Any other tools
<i>Target condition:</i>	Dementia
<i>Reference Standard:</i>	Any reported reference standard
<i>Outcome:</i>	Sensitivity & specificity for assessing neurological monitoring following head trauma

Clinical and research implications

No relevant evidence was found to answer this question. Therefore, high-quality research is needed in this area.

What does the evidence say?

Number of included studies/reviews (number of participants)

N/A

Main Findings

N/A

Authors Conclusions

N/A

Reliability of conclusions/Strength of evidence

N/A

What do guidelines say?

Although not about the validity of the Glasgow Coma Scale, the National Institute for Health and Care Excellence (NICE) guidelines, *Triage, assessment, investigation and early management of head injury in children, young people and adults* (CG176, 2014), make the following recommendation regarding the use of the Glasgow Coma Scale in patients with dementia:

“In some patients (for example, patients with dementia, underlying chronic neurological disorders or learning disabilities) the pre-injury baseline GCS may be less than 15. Establish this where possible, and take it into account during assessment.” (p.18)

Scottish Intercollegiate Guidelines Network (SIGN) guidelines do not make recommendations regarding the validity or the use of the Glasgow Coma Scale in patients with dementia.

Date question received: 23/09/2014

Date searches conducted: 29/09/2014

Date answer completed: 01/10/2014

References

National Institute for Health and Care Excellence. (2014). *Triage, assessment, investigation and early management of head injury in children, young people and adults* (CG176). London: National Institute for Health and Care Excellence.

<http://www.nice.org.uk/guidance/cg176/resources/guidance-head-injury-pdf>

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
<i>SRs and Guidelines</i>			
NICE	Glasgow coma scale dementia	5	1
DARE	(Glasgow ADJ2 coma*) IN DARE 33 Delete 2 MeSH DESCRIPTOR Glasgow Coma Scale EXPLODE ALL TREES 27 Delete 3 ((neuro* OR (head OR brain) adj2 (trauma* OR injur*)) adj3 assess*) IN DARE 68 Delete 4 (GCS) IN DARE 11 Delete 5 #1 OR #2 OR #3 OR #4 125 Delete 6 (dement* OR alzheimer*) IN DARE 694 Delete 7 MeSH DESCRIPTOR Alzheimer Disease EXPLODE ALL TREES 297 Delete 8 MeSH DESCRIPTOR Dementia EXPLODE ALL TREES 593 Delete 9 MeSH DESCRIPTOR Dementia, Vascular EXPLODE ALL TREES 21 Delete 10 MeSH DESCRIPTOR Frontotemporal Dementia EXPLODE ALL TREES 3 Delete 11 MeSH DESCRIPTOR Lewy Body Disease EXPLODE ALL TREES 6 Delete 12 #6 OR #7 OR #8 OR #9 OR #10 OR #11 928 Delete 13 #5 AND #12	4	0
<i>Primary studies</i>			
MEDLINE	11. MEDLINE; "glasgow coma scale".ti,ab; 5633 results. 12. MEDLINE; exp DEMENTIA/; 123626 results. 13. MEDLINE; TRAUMATIC BRAIN INJURY [+NT]/ OR exp HEAD INJURIES/; 124052 results. 14. MEDLINE; 12 AND 13; 813 results. 15. MEDLINE; (dementia adj2 head AND injury OR trauma).ti,ab; 158523 results. 16. MEDLINE; (dementia adj2 "head injury" OR trauma).ti,ab; 158527 results. 17. MEDLINE; 14 OR 16; 159211 results. 18. MEDLINE; 11 AND 17; 2138 results.	405	0

	<p>19. MEDLINE; child*.ti,ab; 1025343 results.</p> <p>20. MEDLINE; 18 not 19; 1789 results.</p> <p>21. MEDLINE; exp "SENSITIVITY AND SPECIFICITY"/; 431489 results.</p> <p>22. MEDLINE; sensitivity.tw.; 554360 results.</p> <p>23. MEDLINE; specificity.tw.; 335652 results.</p> <p>24. MEDLINE; pre-test OR pretest ADJ probability.tw.; 4626 results.</p> <p>25. MEDLINE; post-test ADJ probability.tw.; 378 results.</p> <p>26. MEDLINE; "predictive value*".tw; 71621 results.</p> <p>27. MEDLINE; "likelihood ratio*".tw; 9502 results.</p> <p>28. MEDLINE; 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27; 1072573 results.</p> <p>29. MEDLINE; 20 AND 28; 386 results.</p> <p>30. MEDLINE; GLASGOW COMA SCALE/; 7141 results.</p> <p>31. MEDLINE; 17 AND 30; 2183 results.</p> <p>32. MEDLINE; 31 not 19; 1793 results.</p> <p>33. MEDLINE; 28 AND 32; 405 results.</p>		
PsycINFO	<p>1. PsycINFO; "glasgow coma scale".ti,ab; 601 results.</p> <p>2. PsycINFO; exp DEMENTIA/; 53347 results.</p> <p>3. PsycINFO; TRAUMATIC BRAIN INJURY [+NT]/ OR exp HEAD INJURIES/; 15005 results.</p> <p>4. PsycINFO; 2 AND 3; 263 results.</p> <p>5. PsycINFO; (dementia adj2 head AND injury OR trauma).ti,ab; 38984 results.</p> <p>6. PsycINFO; (dementia adj2 "head injury" OR trauma).ti,ab; 38995 results.</p> <p>7. PsycINFO; 4 OR 6; 39202 results.</p> <p>8. PsycINFO; 1 AND 7; 133 results.</p> <p>9. PsycINFO; child*.ti,ab; 533248 results.</p> <p>10. PsycINFO; 8 not 9; 100 results.</p>	100	0
Embase	<p>35. EMBASE; exp DEMENTIA/; 228804 results.</p> <p>36. EMBASE; TRAUMATIC BRAIN INJURY [+NT]/ OR exp HEAD INJURIES/; 209909 results.</p> <p>37. EMBASE; 35 AND 36; 6283 results.</p> <p>38. EMBASE; (dementia adj2 head AND injury OR trauma).ti,ab; 187164 results.</p> <p>39. EMBASE; (dementia adj2 "head injury" OR trauma).ti,ab; 187169 results.</p>		0

<p>40. EMBASE; 37 OR 39; 192869 results.</p> <p>41. EMBASE; 34 AND 40; 2526 results.</p> <p>42. EMBASE; child*.ti,ab; 1177037 results.</p> <p>43. EMBASE; 41 not 42; 2120 results.</p> <p>44. EMBASE; exp "SENSITIVITY AND SPECIFICITY"/; 205538 results.</p> <p>45. EMBASE; sensitivity.tw.; 632055 results.</p> <p>46. EMBASE; specificity.tw.; 378416 results.</p> <p>47. EMBASE; pre-test OR pretest ADJ probability.tw.; 6769 results.</p> <p>48. EMBASE; post-test ADJ probability.tw.; 489 results.</p> <p>49. EMBASE; "predictive value*".tw; 93192 results.</p> <p>50. EMBASE; "likelihood ratio*".tw; 11454 results.</p> <p>51. EMBASE; 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50; 978612 results.</p> <p>52. EMBASE; 43 AND 51; 214 results.</p> <p>53. EMBASE; GLASGOW COMA SCALE/; 14053 results.</p> <p>54. EMBASE; 40 AND 53; 3441 results.</p> <p>55. EMBASE; 54 not 42; 2892 results.</p> <p>56. EMBASE; 51 AND 55; 253 results.</p>		
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