

Neurotrauma Quiz – August 2016*

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- Q1.** In context of randomized clinical trial what is true?
- Each participant has equal likelihood of being assigned to various arms of a study.
 - Selection and accidental bias is a possibility.
 - There is a possibility that unequal number of individuals may be assigned to each arm of the study.
 - All of the above.
- Q2.** What is not true about block randomization?
- High chances of unequal number of individuals assigned to various arms of a study.
 - Decrease the power to detect statistically significant differences between groups.
 - Block randomization is better than simple random allocation.
 - Simple random allocation is better than block randomization.
- Q3.** What is one of the biomarkers that shows promise in the evaluation of traumatic brain injury?
- Creatine kinase
 - Nitrotyrosine
 - Rubidium chloride
 - Troponin-I
- Q4.** In block randomization, what is not true?
- Allocation of participants may be predictable.
 - Selection bias can occur if the study groups are unmasked.
 - Selection bias can be reduced by using fixed block sizes.
 - Selection bias can be reduced by keeping the investigator blind to the size of each block.
- Q5.** What is not true about INTRUST Trial?
- It is a randomized clinical trial of glyburide for traumatic brain injury.
 - Glyburide is an antihypertensive drug.
 - Study will measure swelling and bleeding in the brain, as measured with magnetic resonance imaging and computed tomography scans.
 - Intravenous formulation of glyburide will be used in the trial.
- Q6.** What is not true about HOPES Trial?
- To find out if therapeutic hypothermia improves outcome following traumatic brain injury which requires surgery.
 - Therapeutic hypothermia body temperature target is about 33°C or 91.4°F.
 - Only patients requiring surgery will be included in the trial.
 - Severe head injury patients not requiring surgery will be included in the trial.
- Q7.** What is not true about DECRA Trial?
- Study included patients with severe diffuse traumatic brain injury.
 - The two arms of the trial were bifrontal decompressive craniectomy and standard medical management or standard medical management alone.
 - Trial provided convincing evidence that early neuroprotective bifrontal decompressive craniectomy is not superior to medical management for patients with diffuse traumatic brain injury.
 - All of the above are wrong.
- Q8.** What is not true about RESCUEicp Trial?
- Duration of refractory intracranial hypertension was 1 hour.
 - The study recruited 400 patients.
 - Intracranial pressure threshold used was 20 mm Hg.
 - Only patients with severe, sustained and refractory posttraumatic intracranial hypertension were recruited.
- Q9.** What is not true about RESCUE-ASDH Trial?
- Eligible patients are randomized to craniotomy or decompressive craniectomy intraoperatively.
 - Both bilateral acute subdural hematomas requiring evacuation are excluded.
 - Study will compare the clinical effectiveness of primary decompressive craniectomy versus craniotomy.
 - Large Intracerebral hematomas causing mass effect are included in the study.

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*The key to this Neurotrauma Quiz can be found in online version of the issue (August 2016).

Q10. What is not true about CRASH 3 Trial?

- A. Trial is studying tranexamic acid for the treatment of significant traumatic brain injury.
- B. Adults with traumatic brain injury who are within 12 hours of injury are recruited.
- C. A loading dose of tranexamic acid used is 1 g by intravenous injection
- D. A total of 10,000 adult traumatic brain injury patients will be randomized in this study.

Q11. What special provision must be made during air transfer of a patient with a comorbid pulmonary injury?

- A. Nonpressurized cabin.
- B. Presence of a physician on board.
- C. Shorter flight time.
- D. Lower flight altitude.

Q12. What is not true about CRASH 2 Trial?

- A. Studied the effects of the early administration of tranexamic acid on death, vascular events, and transfusion requirements.
- B. Adults with trauma within 8 hours of injury and have significant hemorrhage were included,
- C. Tranexamic acid in loading dose of 2 gm or placebo was given intravenously.
- D. Tranexamic acid in maintenance dose of 1 gm intravenously over 8 hours was used.

Q13. What is not true about CRASH 2 Trial?

- A. Early administration of tranexamic acid safely reduced the risk of death in bleeding trauma patients.
- B. Treatment beyond 3 hours of injury is unlikely to be effective.
- C. More than 10,000 patients were recruited in each arm.
- D. Increase in vascular occlusive events was observed in this study.

Q14. According to the Rancho Los Amigos Scale, Level VIII is reported as:

- A. Confused—appropriate.
- B. Localized response.
- C. No response.
- D. Purposeful and appropriate response.

Q15. A patient who has sustained a fracture to the middle cranial fossa following a fall from a height, might have any of these nerves injured except:

- A. Trigeminal
- B. Abducens
- C. Trochlear
- D. Hypoglossal

Key to Neurotrauma Quiz: August 2016

Question no.	Question	Key
1.	In context of randomized clinical trial what is true?	D
2.	What is not true about block randomization?	D
3.	What is one of the biomarkers that shows promise in the evaluation of TBI?	B
4.	In block randomization what is not true?	C
5.	What is not true about INTRUST Trial?	B
6.	What is not true about HOPES Trial?	D
7.	What is not true about DECRA Trial?	D
8.	What is not true about RESCUEicp Trial?	C
9.	What is not true about RESCUE-ASDH Trial?	D
10.	What is not true about CRASH 3 Trial?	B
11.	What special provision must be made during air transfer of a patient with a comorbid pulmonary injury?	D
12.	What is not true about CRASH 2 Trial?	C
13.	What is not true about CRASH 2 Trial?	D
14.	According to the Rancho Los Amigos Scale, Level VIII is reported as:	D
15.	A patient who has sustained a fracture to the middle cranial fossa following a fall from a height, might have any of these nerves injured except:	D