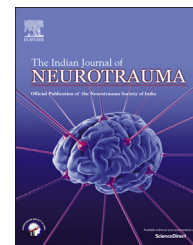




ELSEVIER

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

journal homepage: [www.elsevier.com/locate/ijnt](http://www.elsevier.com/locate/ijnt)

## Neurotrauma quiz – December 2013<sup>☆</sup>

- Decrease in CBF is seen after administration of
  - Isoflurane
  - Desflurane
  - Ketamine
  - Propofol
- When assessing a patient with a head injury which order should the assessment take?
  - Deficit (neuro), Airway, Breathing, Circulation
  - Airway, Deficit, Breathing, Circulation
  - Airway, Breathing, Deficit, Circulation
  - Airway, Breathing, Circulation, Deficit
- To mark the patient as having “localised to pain” the patient must have
  - Grabbed at and removed the noxious stimuli (also known as the sats probe sign)
  - Made a purposeful withdrawal from the stimuli
  - Raised an arm by bending an elbow
  - Moved an arm across either the nipple line or the central body line toward the stimuli
- What is the maximum length of time that noxious stimuli should be applied for?
  - 2 s
  - 5 s
  - 10 s
  - 20 s
- Refeeding syndrome can be defined as the potentially fatal shifts in fluids and electrolytes that may occur in malnourished patients receiving artificial refeeding. What is not true about this syndrome?
  - The hallmark biochemical feature of refeeding syndrome is hypophosphataemia
  - The underlying causative factor of refeeding syndrome is the metabolic and hormonal changes caused by rapid refeeding,
  - Thiamine deficiency; hypokalaemia; and hypomagnesaemia.
  - All are true
- A 57-year-old woman is involved in a car accident in which she strikes the windshield. After brief unconscious, she makes a full recovery. Three months later she notices that she cannot taste the food she is eating. This is most likely due to which of the following?
  - Medullary infarction
  - Temporal lobe contusion
  - Phenytoin use to prevent seizures
  - Avulsion of olfactory rootlets
- A 26-year-old 10 weeks pregnant, by mistake receives a chest X-ray and an X-ray of her lower spine. Which of the following is the most appropriate statement to make to the patient?
  - The fetus has received 50 rads
  - Either chorionic villus sampling (CVS) or amniocentesis is advisable to check for fetal chromosomal abnormalities
  - At 10 weeks, the fetus is particularly susceptible to derangements of the central nervous system
  - The fetus has received less than the assumed threshold for radiation damage
- A 35-year-old man sustained thoracic spine injury in an accident 3 years ago. Initially he had a bilateral spastic paraparesis and urinary urgency, but this has improved. He still has pain and thermal sensation loss on part of his left body and proprioception loss in his right foot. There is still a paralysis of the right lower extremity as well. This patient most likely has which of the following spinal cord conditions?
  - Brown-Séquard (hemisection) syndrome
  - Complete transection
  - Posterior column syndrome
  - Syringomyelic syndrome
- 34 years old man fractures his humerus in road accident. Next day, he notices weakness on attempted flexion at the elbow. He develops paresthesias over the radial and volar aspects of the forearm. During the accident, he probably injured which one of the following nerves?
  - Suprascapular nerve
  - Long thoracic nerve
  - Musculocutaneous nerve
  - Median nerve
- Car driver is involved in a head-on collision with a stationary truck. His head hits the windshield. He is highly likely to have an intracranial hemorrhage in which one of the following structures?
  - Occipital lobe
  - Thalamus
  - Parietal lobe
  - Temporal lobe
- 26 years old boy is involved in a diving accident. He is fully conscious, no cranial nerve involvement, and is

<sup>☆</sup> The Key to Neurotrauma Quiz can be found in online version of issue (December 2013).

able to lift his shoulders. He is flaccid and has a sensory level at C5. Appropriate management includes which of the following?

- a) Naloxone hydrochloride
  - b) Intravenous methylprednisolone
  - c) Oral dexamethasone
  - d) Hyperbaric oxygen therapy
12. Young man is hit in the face with an iron rod. The ocular motor muscle most likely to be injured in this case is that innervated by which of the following?
- a) Superior division of the third cranial nerve
  - b) Fourth (trochlear) cranial nerve
  - c) Sixth (abducens) cranial nerve
  - d) Long ciliary nerve
13. Which of the following chelating agents is recommended for acute lead poisoning with signs of encephalopathy?
- a) Penicillamine
  - b) Dimercaprol
  - c) Calcium EDTA
  - d) Dimercaprol + Calcium EDTA
14. The most accurate method of measuring intracranial pressure (ICP) is:
- a) Extradural probe
  - b) Subarachnoid probe
  - c) Transcranial doppler
  - d) Intraventricular catheter
15. Which of the following statement is not true?
- a) With certain exceptions, epidural hematomas >30 mL in volume and associated with >5 mm of midline shift in the supratentorial space should be evacuated as soon as possible

- b) Acute traumatic subdural hematomas with  $\geq 10$  mm in thickness with  $\geq 5$  mm of midline shift demonstrable on CT are similar require emergent evacuation
- c) Surgical evacuation of traumatic intraparenchymal hematomas may be indicated for volumes >20 mL if located in the frontal or temporal lobes, or >50 mL in any other location
- d) Large basal ganglia and thalamic hematomas (>85 mL), usually hypertensive in nature are associated good prognosis if decompression occurs within 4 h

Neerja Johar\*

Senior Consultant & Head, Neuro Anaesthesia, Neuro Critical Care and Pain Medicine, Max Institute of Neurosciences, Dehradun, Uttarakhand, India

Devika Dua\*\*

Department of Internal Medicine, Post Graduate Institute of Medical Sciences, Chandigarh, India

\*Corresponding author. Tel.: +91 8755648648.

E-mail address: [dr.njohar@gmail.com](mailto:dr.njohar@gmail.com)

\*\*Corresponding author. Tel.: +91 8195047444.

E-mail address: [sphinx18@gmail.com](mailto:sphinx18@gmail.com)

0973-0508/\$ – see front matter

Copyright © 2013, Neurotrauma Society of India. All rights reserved.

<http://dx.doi.org/10.1016/j.ijnt.2013.11.006>

Number	Question	Key
1	Decrease in CBF is seen after administration of	d
2	When assessing a patient with a head injury which order should the assessment take?	d
3	To mark the patient as having "localised to pain" the patient must have	d
4	What is the maximum length of time that noxious stimuli should be applied for?	d
5	Refeeding syndrome can be defined as the potentially fatal shifts in fluids and electrolytes that may occur in malnourished patients receiving artificial refeeding. What is not true about this syndrome?	d
6	A 57-year-old woman is involved in a car accident in which she strikes the windshield. After brief unconscious, she makes a full recovery. Three months later she notices that she cannot taste the food she is eating. This is most likely due to which of the following?	d
7	A 26-year-old 10 weeks pregnant, by mistake receives a chest X-ray and an X-ray of her lower spine. Which of the following is the most appropriate statement to make to the patient?	d
8	A 35-year-old man sustained thoracic spine injury in an accident 3 years ago. Initially he had a bilateral spastic paraparesis and urinary urgency, but this has improved. He still has pain and thermal sensation loss on part of his left body and proprioception loss in his right foot. There is still a paralysis of the right lower extremity as well. This patient most likely has which of the following spinal cord conditions?	a
9	34 years old man fractures his humerus in road accident. Next day, he notices weakness on attempted flexion at the elbow. He develops paresthesias over the radial and volar aspects of the forearm. During the accident, he probably injured which one of the following nerves?	c
10	Car driver is involved in a head-on collision with a stationary truck. His head hits the windshield. He is highly likely to have an intracranial hemorrhage in which one of the following structures?	d
11	26 years old boy is involved in a diving accident. He is fully conscious, no cranial nerve involvement, and is able to lift his shoulders. He is flaccid and has a sensory level at C5. Appropriate management includes which of the following?	b
12	Young man is hit in the face with an iron rod. The ocular motor muscle most likely to be injured in this case is that innervated by which of the following?	b
13	Which of the following chelating agents is recommended for acute lead poisoning with signs of encephalopathy?	d
14	The most accurate method of measuring intracranial pressure (ICP) is:	d
15	Which of the following statement is not true?	d