

Syllabus	NA_IK_21
Topic	Epilepsy

a)

Define status epilepticus? (2 marks)

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.....

b)

List 3 important implications of a general anaesthetic for a patient with epilepsy? (3 marks)

1.
2.
3.

c)

List 6 signs that may indicate a patient is having a seizure under general anaesthetic with neuromuscular blockade? (6 marks)

1.
2.
3.
4.
5.
6.

d)

What are the important steps in managing a seizure under general anaesthetic (4 marks)

1.
2.
3.
4.

e)

Name 3 commonly used drugs during a general anaesthetic that should be avoided due to their directly pro-convulsant actions? (3 marks)

1.
2.
3.

f)

List the 4 most common differential diagnoses that may be mistaken for a seizure in recovery? (4 marks)

1.
2.
3.
4.

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Q	Answer	Mark	Guidance
a)	• Seizure activity lasting greater than 5 minutes	1	Conventional definition of >30 minutes has now been updated to 5 minutes as this is when treatment should be implemented.
	• Or with no recovery between seizures	1	
b)	• Increased risk of seizures intra-operatively and post-operatively	1	
	• Challenge of managing anti-epileptic drugs while nil by mouth.	1	
	• Drug interactions with anti-epileptic drugs causing either toxicity or reduced efficacy.	1	
c)	• Increased CO ₂ production.	1	Accept increased ETCO ₂ . Accepted increased FiO ₂ requirements.
	• Increased O ₂ consumption.	1	
	• Increased HR.	1	
	• Increased BP.	1	
	• Dilated pupils	1	
• Increased muscle tone	1		
d)	• 100% O ₂ .	1	No mark for ABC. Accept propofol, thiopentone bolus. Only 1 mark for correct hypoxia with 100% O ₂ .
	• Deepen general anaesthetic.	1	
	• Correct precipitating factors – eg – hypoglycaemia, hypoxia, hypercarbia	1	
	• Consider giving anti-epileptic drugs.	1	
e)	• Antibiotics -eg penicillins, cephalosporins, carbapenems.	1	Don't accept N ₂ O as only been shown in animals models not reproduced in human studies.
	• Tramadol	1	
	• Ketamine	1	
f)	• Shivering	1	Accept pseudo-seizures.
	• Non-epileptic seizures	1	
	• Acute dystonic drug reactions eg- to dopamine agonists	1	
	• Syncopal episode.	1	

References:

1) Eleanor L Carter, Ram M Adapa. Adult epilepsy and anaesthesia. BJA Education (2015) 15(3)111–117 <https://academic.oup.com/bjaed/article/15/3/111/279202>