THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0124] JANUARY 2024 Sub. Code :1519

D.M. – NEURO ANEASTHESIA

PAPER – IV – RECENT ADVANCES IN NEURO ANEASTHESIA

Q.P. Code: 161519

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss in detail the recent concepts in Cerebral Autoregulation and the various techniques used to assess Autoregulation.

2. Define Death by Neurologic criteria and discuss in detail the clinical components of the Brain death examination.

II. Write notes on: **(10 x 7 = 70)**

1. Discuss in brief the various outcome assessment scales in Neurology.
2. Role of Transcranial Doppler in the diagnosis and treatment of Stroke.
3. Nonoperating room Anaesthesia for Neurological Procedures.
4. Discuss in brief the effect of anaesthetics on Microelectrode Recordings.
5. Role of Biomarkers in Traumatic Brain Injury.
6. Oxygen Reserve Index.
7. Discuss the emerging role of Dexmedetomidine in Neuroanaesthesia.
8. Discuss the algorithm for the management of cerebral desaturations.
9. Discuss the role of End Expiratory Occlusion Test (EEOT) in Critical Care.
10. Describe the principles of Closed Loop Anaesthesia Delivery System (CLADS).

****

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0225] **FEBRUARY 2025** **Sub. Code :1519**

D.M. – NEURO ANAESTHESIA

PAPER – IV – RECENT ADVANCES IN NEURO ANAESTHESIA

Q.P. Code: 161519

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the anaesthetic concerns in a patient with Parkinson's disease posted for Deep Brain Stimulation.

2. Discuss in detail the analysis of the Intracranial Pressure (ICP) waveform and the various information derived from it.

II. Write notes on: **(10 x 7 = 70)**

1. Discuss in brief the different technologies available for the assessment of analgesia in the Peri-operative setting.

2. Describe in brief – Local Anaesthetic Systemic Toxicity (LAST).

3. Discuss the recent trends in non-invasive monitoring of intracranial pressure.

4. Closed loop anaesthesia delivery system.

5. Discuss with evidence the role of brain tissue oxygen monitoring in severe traumatic brain injury.

6. Discuss in brief diagnostic criteria for the various neuromonitoring techniques available for the detection of delayed cerebral ischemia.

7. Discuss in brief – "same day discharge" for craniotomies an enlist the predictors of successful early discharge.

8. Discuss the role of intraoperative neuromonitoring in the anaesthetic management of endovascular repair of thoracic and abdominal aneurysms.

9. Discuss in brief neuro prognostication in the post cardiac arrest survivor.

10. Compare and Contrast Penumbra and Pen Lucida with clinical relevance.

****