

EEG Burst Suppression Protocol for Aneurysm Clipping

For Drs. Fine, Mayer and Knego

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Indications:

1. Surgeon's request.
2. All cerebral aneurysm cases - the surgeon will try to post this request on the anesthesia comment section. But if in doubt, prepare for burst suppression and check with surgeon prior to induction

Goals

1. Cortical electrical suppression such that the raw EEG on the 5 lead Aspect monitor shows 5-10 activity bursts per minute but otherwise remains flat (some minimal baseline activity will remain between bursts.)
2. Core temperature around 35 deg Celsius. No active cooling in the OR.
3. Rapid awakening after the procedure.

Drug dosing:

1. Burst suppression will be induced with propofol 1-2.5 mg/kg to achieve initial above mentioned burst suppression.
2. After burst suppression is achieved, use propofol infusion to maintain between 5 and 10 bursts per minute until the surgeon requests that burst suppression be stopped.
3. A neosynephrine or epinephrine drip should be available in order to counter the hemodynamic effects of propofol.

Monitoring

1. 5 lead Aspect monitor. Set to EEG. The surgeon will inform the anesthesia team prior to induction of anesthesia that burst suppression may be necessary, so as to allow placement of the monitoring leads and to prepare/order the necessary medications.
2. Usual ASA monitors
3. Invasive arterial blood pressure
4. CVP/Swan if hemodynamically indicated
5. Core temp via swan or esophageal temperature probe