Intravenous drug dose optimization and drug effect monitoring in anaesthesia

Sahinovic, Marko

Stellingen

behorend bij het proefschrift

Intravenous drug dose optimization and drug effect monitoring in anaesthesia

Marko Sahinovic

31 mei 2017

1 Measuring the achieved drug effect is an integral part of any rational drug dosing scheme.

2 The presence of a frontal brain tumour does not affect the BIS monitor values at moments of transitions between the states of responsiveness.

3 The presence of a frontal brain tumour is associated with differences in the pharmacokinetics but not the pharmacodynamics of propofol.

4 Not all pharmacokinetic models for propofol are equally effective in accurately describing the pharmacokinetics in patients with brain tumours.

5 Inadequately supressed noxious stimulation can be detected by the EEG.

6 There is no nociception – anti nociception balance without a noxious stimulus.

7 The EEG derived analgesia indices, "cortical input" (CI) and "composite variability index" (CVI), are superior in detecting inadequately supressed nociception to the haemodynamic variables "heart rate" and "blood pressure".

8 The EEG derived analgesia indices better predict the patient response to inadequately supressed nociception compared to the pharmacodynamic variables "effect site concentration of propofol" (Ce propofol) and "effect site concentration of remifentanil" *(Ce remi)*.

9 Combining EEG derived hypnotic and anti-nociception measures enables a better balanced anaesthesia.

10 True knowledge is knowing that you know nothing *(Socrates)*.