

## **Raw EEG: When To Believe The Magic BIS Number And When To Add A Little Balsamic Vinegar To Disguise The Taste.**

**Jamie Sleigh**

*University of Auckland, Waikato Hospital, Hamilton, New Zealand.*

It is possible to give quite a safe general anaesthetic with almost no monitoring at all. However, monitoring the patient during general anaesthesia is like comfort food. If the patient's heart is beating strong and slow(ish); and if the lungs are easy to ventilate; and if the oxygenation is good even on a modest FIO<sub>2</sub>; and if the patient seems to be asleep (i.e. no sweating or crying) – then a warm post-prandial glow settles within the anaesthetist – happy in the belief that the patient is in a good state to withstand the full force of the surgical assault. If, for some reason, we want to use the EEG as a monitor; the same principles apply. We are only truly content if all the stars to be aligned. (i.e. the EEG indicates a sleeping patient; and the FETAA is 0.7-1.0MAC; and there is adequate suppression of the autonomic responses to surgery.) However sometimes there is discrepancy. It is like eating a sweet slice of cheesecake and unexpectedly biting on an anchovy... In this talk I will indicate the sort of questions to ask, and some possible responses to, the situation where the BIS value is at odds with the rest of the anaesthetic.