

1. Alcohol intoxication increases cerebral blood flow from 8 to 24 %
2. Alcohol intoxication does not impair dynamic cerebral autoregulation
3. Caffeine (300 mg per oral) decreases cerebral blood flow by 20 %
4. Without CO₂ influence, caffeine (300 mg per oral) decreases cerebral blood flow from 10 to 20 %.
5. Caffeine decreases CBF despite severe peripheral cerebrovascular vasodilatation (during hypercapnia caffeine decreases CBF from 11 to 12 %)
6. There is not a statistically significant reduction of CBF during hypocapnia.
7. Vasomotor reactivity testing – Carbon Dioxide challenge test is not affected by pre-test caffeine intake
9. CO₂ is a strong regulator of cerebral blood flow (through the regulation of the tone of cerebral vessels)
10. Cerebral vasomotor reactivity in healthy humans is 86.5 ± 19.1 , and CO₂ reactivity is 3.0 ± 0.6 %/mmHg
11. Cerebral autoregulation is significantly impaired during hypercapnia (autoregulation index decreases from baseline values of 4 ± 0.8 to 0.9 ± 0.9)
12. Increase of etCO₂ by 1mmHg decrease ARI by 8.24 %
13. Traumatic brain injuries cause significant impairment of cerebral autoregulation
14. The cyclic leg cuff autoregulation test appears better suited for clinical use than the hyperemic leg cuff step release method.
15. Cerebral autoregulation may respond with asymmetric reaction – reacts more efficiently against hypertension and hyperperfusion than against hypoperfusion.
15. Caffeine and CO₂ offer the possibility of therapeutic manipulation in cases of traumatic vasoparalysis.