

## **Journal Abstract**

### **REALTIONSHIP OF CNS BLOOD FLOW TO BEAUTY PARLOR STROKE SYNDROME AND SALON SINK RADICULOPATHY**

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**The medical literature has reported that neck position during a salon sink shampoo is associated with ischemic strokes of the posterior intracranial circulation as well as cervical radiculopathy.**

**Here we present the first clinical research study examining the effect of the salon sink neck position on both subjective symptoms (pain and dizziness) and objective-measured blood flow to the central nervous system, via Doppler measurements of blood flow velocity within vertebral and carotid arteries. In 25 adult subjects, these parameters were recorded with each subject sitting upright and again in a reclining position with the head extended back into a salon sink, both with and without a neck support device. As compared with reclining with the neck support device, recordings done without the neck supported showed statistical significance for more pain ( $P = 0.001$ ), more dizziness ( $P = 0.03$ ), and increased (faster) anterior circulation blood flow (via combining the flow in the bilateral carotid arteries) ( $P = 0.04$ ). We hypothesize that the increased anterior circulation flow may represent compensation for posterior circulation that is pathologically compromised by neck extension without support. We conclude that the neck position assumed for a salon sink shampoo does have statistically significant effects on both symptoms and blood flow.**

**Further research is needed.**

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