

Effect of Jugular Compression (Queckenstedt manoeuvre) on Cranial Movement perception. A pilot study.

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Efficacy of osteopathy in the cranial field is dependent on the belief that the bones of the cranium are mobile. Even if the mechanism responsible for cranial movement (CM) is as yet poorly understood, it is speculated that changes in intracranial pressure can generate a movement of cranial bones. If this model is valid, an increase in intracranial pressure, produced by using a bilateral compression of internal jugular veins (the Queckenstedt manoeuvre or Q-test), should be detectable by osteopaths. The aim of the study was to determine whether the application of the Q-test can be perceived by osteopaths as a modification of the CM. Eight blindfolded osteopaths evaluated the CM of 6 volunteers and reported any change in CM width during three different periods each of one-minute duration. The first period (base) did not foresee any type of intervention, in the second (expectation) and third (compression) the osteopaths expected an external manoeuvre but only in the compression period the Q-test was actually performed. We analysed the total number of variations perceived in each period (PV) by all osteopath on all volunteers. The number of PV between periods was statistical significantly different ( $p < 0.001$ ; Kruskal-Wallis test). Between the compression period and the other two periods, a significant increase in PV was revealed (base  $p = 0,003$  and expectation  $p = 0,009$ ) indicating that the Q-test has an effect detectable by palpation. A significant difference between the base period and the expectation period was also present ( $p = 0,003$ ), indicating a role of expectancy in palpation.