

## Update 23

### Cervical Spine Adjustment & Short-Term Lymphocytic Response - A pilot Study

A growing body of research suggests that the immune system does not act independent of the nervous system. The authors of this single-blind, randomised, controlled pilot study contend that because of the links between the nervous and immune systems they set out to,

“..monitor the ability of lymphocytes (T and B cells) isolated from asymptomatic subjects to respond to mitogen stimulation following chiropractic upper cervical manipulation.”

Four male and 6 female volunteers were located via convenience sampling.

All subjects were asymptomatic but exhibited clinical evidence of cervical joint dysfunction.

Subjects were randomly allocated to either the sham or manipulation group.

Those in the manipulation group received a high velocity, low amplitude thrust at the level of the joint dysfunction, whilst those in the sham group received a thrust from a deactivated Activator instrument at the level adjacent to the level(s) of joint dysfunction.

Peripheral blood was taken 15-20 minutes pre- and post-adjustment.

Descriptive statistics suggest that a statistically significant ( $p < 0.05$ ) decrease in lymphocyte activation took place following upper cervical manipulation. Furthermore, the authors note that the sham group experienced a marked, and statistically significant, increase in lymphocyte activation after treatment.

The authors conclude that, “The results suggest that an immediate, meaningful reduction in lymphocyte activation may occur after upper cervical manipulation, compared to a sham intervention.”

**ASRF editor’s comments:** At this point I only have access to the abstract and brief summary of the above paper that was provided in the proceedings of the WFC’s Conference, 2003. Unfortunately the authors make no attempt to give meaning to the ‘marked’, and statistically significant, rise in lymphocyte activity experienced in the members of the sham group, except to recommend that, I quote, “...the same patient work-up protocol should be used for all treatment groups, apart from the actual intervention.”

#### Reference:

Davidson S, Parkin-Smith GF. The possible effect of cervical chiropractic manipulation on short-term lymphocytic response - a pilot study. Proceedings [WFC’s 7th Biennial Congress], Orlando, Florida, USA, May 1-3, 2003:278-80.