

Update 2

Self-healing Ability and Nerve Supply

One defining characteristic common to all chiropractors is that they neither prescribe drugs nor perform surgery. Chiropractors choose not to participate in either of these activities because they contend that the body has an inborn self-healing and self-regulating capacity that should be respected and gently facilitated rather than being interfered with.

In this ASRF Patient Education Update we review 2 studies that suggest the body has an amazing self-healing and self-regulating capacity. Moreover, the second of the 2 studies suggests that a fully functioning nervous system is an integral player in the healing process.

The treatment of cuts through stitching, consume tremendous resources. When asking your doctor, "Will this cut need stitches?" you would expect the answer to be based on research carried out over the years. However, in truth, the answer to date has always been given on no more than opinion based on experience. That is because until the results of a new study were published in August in the British Medical Journal (*BMJ* 2002; 325:299), the value of stitching a cut had never been objectively studied.

The new study, a randomized clinical trial, set out to assess the difference in outcome between cuts of the hand treated with stitches and those left to heal without stitches.

Ninety-one patients with 95 lacerations who attended the emergency department of a hospital were enrolled into the study. The patients were only included in the study if they had an uncomplicated cut of the hand that would usually receive stitches and if they were happy to be put in either of the two groups (with or without stitches).

The researchers judged the results of the two approaches to cut healing by comparing the cosmetic appearance of the cuts after three months. They also compared the duration of treatment, pain during treatment, patients' assessment of their outcome, and the time for patients to resume normal activities.

Participants treated with stitches and those left to heal without stitches did not differ significantly in terms of cosmetic appearance after three months. Furthermore, the time to resume normal activities was the same in each group, patients who were not stitched had less pain, and those not stitched had shorter treatment times.

The authors conclude that, "Uncomplicated lacerations (cuts) of the hand, shorter than 2 cm, are currently being sutured unnecessarily and would heal with similar results without sutures".

The second important study titled, 'Neural innervation and healing' (*Lancet* 1997; 350:339-40), reports the findings of a study designed to examine wound healing without normal nerve supply by creating an area of tissue without neural input in 25 rats.

All connections between the flap of tissue and the body were divided and blood supply was then re-established. The authors found that the rate of wound healing in 1 cm wounds, created on the flaps without a nerve supply, was significantly reduced (70% slower) compared with wounds having normal nerve supply. Furthermore, the authors found that the tissue without a normal nerve supply had less immune cells (monocyte, macrophage, and T lymphocytes) compared to wounds in tissue with normal nerve supply.

In summary, both these important studies support the importance that chiropractors place on the nervous system and the body's ability to heal itself. We might conclude that:

- The body has an incredible inborn capacity to heal itself
- The nervous system has an integral role in the healing process