Acupuncture for chemotherapy-induced peripheral neuropathy (CIPN): a pilot study using neurography Online First doi 10.1136/acupmed-2011-010034

Acupuncture may help ease the severe nerve pain associated with certain cancer drugs, suggests a small preliminary study published in Acupuncture in Medicine.

Cancer patients treated with taxanes, vinca alkaloids, or platinum compounds can develop a condition known as chemotherapy induced peripheral neuropathy, or CIPN for short, as a by-product of their treatment. These powerful drugs can damage peripheral nerves, particularly in the calves and feet, which can result in severe nerve pain and/or difficulty walking. As yet, there is no effective antidote.

Out of a total of 192 patients with peripheral neuropathy eligible for inclusion in the study, 11 had developed their symptoms during a course of chemotherapy for various types of cancer. Six of these patients agreed to undergo acupuncture; the other five served as a comparison group.

Twenty needles were inserted at prescribed points and depths and left in place for 20 minutes during each of the 10 sessions. These were delivered over a period of three months by a senior doctor, who had been fully trained in acupuncture and had used the technique for 20 years.

Nerve conduction studies, to assess the signalling speed and intensity of two nerves in the same calf were carried out before acupuncture and again six months after chemotherapy in the six volunteers. The same studies on patients in the comparison group were carried out after they had completed their chemotherapy and then again six months later.

At the second neurological assessment, patients in both groups were asked to state whether they thought their condition had changed or stayed the same.

Clinical examination showed that all the patients had a mixture of numbness on touch and nerve pain, while nerve conduction studies showed evidence of damage to the sural nerve.

In those given acupuncture, both the speed and the intensity of the nerve signalling improved in five out of the six patients. And these same patients said their condition had improved. Among those in the comparison group, speed remained the same in three, fell in one, and improved in one. Intensity remained the same in one, improved in two, and decreased in two.

The authors point to previous research, which suggests that acupuncture may boost blood flow in the legs, which may in turn aid the repair of nerve damage.

“The data suggest that acupuncture has a positive effect on CIPN, as measured by objective parameters [nerve conduction studies],” write the authors, adding that their results are similar to those found in patients with nerve damage caused by diabetes and those with peripheral neuropathy of unknown cause.

They conclude that the results of this pilot study are “encouraging,” and merit further investigation in a larger trial.