

Research news – compiled by ARRC

January – March 2006

More on the virtual acupuncture human (see last issue)

The proposed 3-D interactive human model will support a force feedback interface for needle insertion, so students can ‘touch’ as well as ‘see’ the virtual patient. Hong Kong scientists report that they will use a newly developed ‘intelligent fuzzy petri net’ to accomplish this.

Heng PA, Wong TT, Yang R, Chui YP et al. *Intelligent inferencing and haptic simulation for Chinese acupuncture learning and training*. IEEE Trans Inf Technol Biomed. 2006;10(1):28-41.

Electrical measurements demonstrate Qi changes in meridians?

One way of investigating the energetic properties of meridians is to measure the electrical potential along them. This study recorded the change in potential between St 37 and St 39 in response to needling St 36. Twenty healthy subjects were compared against 20 with gastric disease. The latter had lower potentials than the healthy subjects and also significantly lower values in the left side meridian than the right. Healthy people showed no such differences and had regular response patterns too. The authors equate such electrical properties to manifestations of Qi and suggest that potential difference measurements could be used diagnostically.

Lee YH, Lee MS, Shin BC, Jeong JS et al. Effects of acupuncture on potential along meridians of healthy subjects and patients with gastric disease. *American J. Chinese Med.* 2005;33(6):879-85

Acupuncture: quo vadis?

Now that many of the results are in from the German health insurance trials reviewers are starting to speculate about their wider significance (hence the Latin title). One group ran RCTs with c. 300 patients, the other with almost 1000 (their first published data, on migraine, were highlighted recently on the BBC website health pages). The results indicated that acupuncture is effective for migraine, tension headache, knee osteoarthritis and (chronic) back pain. For the latter two, acupuncture was superior to conventional standard treatment. It is in the interpretation of the comparisons with sham acupuncture that the picture becomes more murky. These authors believe that the data support neither the ‘it doesn’t matter where you put the needle’ brigade nor the irrefutability of Chinese Medicine theory. We need to know more about the underlying mechanisms of acupuncture. Also, we’re ignorant of the relative importance in different diseases of factors such as the choice of points needled, the way in which they are needled and the patient-practitioner interaction. Acupuncture research is still in its infancy and it is wise to avoid jumping to premature conclusions, however large the data set.

Backer M, Tao I, Dobos GJ. [*Acupuncture: quo vadis?*] *Dtsch Med Wochenschr.* 2006;131(10):506-511. [German]

Meanwhile, in the same journal, one man may have a clearer vision

Ernst E. [*Acupuncture - clarity at last?*] Dtsch Med Wochenschr. 2006;131(10):483-4. [German]

Shock resuscitation with acupuncture: case report

A 77 year old aboriginal woman in an isolated village became drowsy and shocked. Poor weather conditions delayed the arrival of the medical and support team — the roads had been seriously destroyed by torrential rains and helicopter was the only means for delivering critical medical care and support. While waiting for the arrival of the helicopter, and in the absence of the necessary emergency medical equipment, the patient's condition deteriorated. Administration of persistent emergency acupuncture stimulation for 80 minutes helped maintain the patient's vital signs until successful transfer of the patient to hospital. She recovered without any complications of shock and was discharged six days later.

Hsu CH, Hua Y, Jong GP, Chao CL et al. *Shock resuscitation with acupuncture: case report*. Emerg Med J. 2006;23(3):e18.

Early acupuncture treatment improves the prospects for babies born with brain injuries

This was a Chinese RCT, carried out at the acute stage of the condition, prior to hospital discharge. 148 newborn babies with (anoxic or ischaemic) brain injuries were treated with either acupuncture or, in the control group, 'a routine infanticultural measure'. The nature of the acupuncture was described as 'comprehensive interference'. Intelligence tests at 6, 12 and 18 months showed the acupuncture group to be 15, 21 and 24 points respectively ahead of the control. At 18 months only 7% of the acupuncture patients were classified as 'maimed' compared with 34% in the control.

Cao WS. [*Effect of acupuncture at early stage on prognosis of the infantile of anoxic and ischemic cerebral injury*] Zhongguo Zhen Jiu. 2006;26(1):18-20. [Chinese]

Acupuncture combines well with 'spiritual' psychotherapy for HIV drug users

In this study the patients were divided between two different ear acupuncture protocols: standard NADA (5-needle) or a reduced, escalating dose (1 to 3 needles). In addition, the last 15 (of the 40 HIV positive cocaine users) subjects also received spiritually-focused group therapy. Treatment was offered five days per week for eight weeks. There were no significant differences between the two acupuncture approaches. However, those patients who also received the group therapy stayed off heroin and cocaine longer (from urine sample analysis) and were less anxious and depressed.

Margolin A, Avants SK, Arnold R. *Acupuncture and spirituality-focused group therapy for the treatment of HIV-positive drug users: a preliminary study*. J Psychoactive Drugs. 2005;37(4):385-90.

Acupuncture for tinnitus: do-able research for practitioners?

The existing reviews of RCTs of acupuncture for tinnitus are disappointing, drawing questionable conclusions from poor trials. This is a very different sort of study, being carried out by a newly qualified practitioner for his MSc dissertation. It is essentially a collection of six case studies with systematic recording of tinnitus symptoms before and after an intensive two-week, ten-session treatment period. Patients kept daily diaries to record loudness and pitch of the noises, number of waking hours affected and quality of sleep for 14 days pre- and post-treatment. The acupuncture was individualised and based on TCM principles. The results were convincingly positive for waking hours affected and sleep quality, less so for the other two symptoms. Such studies (called n=1 trials by researchers) can be relatively cheap and simple to perform, though the statistics required to analyse them most appropriately may be anything but simple.

Jackson A, Macpherson H, Hahn S. *Acupuncture for tinnitus: A series of six n=1 controlled trials*. *Complement Ther Med*. 2006;14(1):39-46.

Characteristics of our patients

The 9408 patients of BAcC members that were used in 2002 for an adverse event survey have also furnished demographic and other data. Of particular interest was to gather information about presenting complaints, for which little prior data exists. 74% of patients were female, 73% were either self-referred or recommended by family/friends/colleagues, 78% had already consulted their doctor and 95% paid for their own treatment. The most common main complaints were musculo-skeletal (38%), psychological – mainly stress, anxiety and depression (11%), general (9%), neurological – mostly headaches (8%) and gynaecological/obstetric (8%). Compared with a 1988 survey of acupuncture patients there were fewer with musculo-skeletal conditions here, indicating a move towards a wider case mix. However, Wadlow and Peringer's 1995 study, using patients from one of the pre-BAcC professional bodies, gave very similar results to these.

Macpherson H, Sinclair-Lian N, Thomas K. *Patients seeking care from acupuncture practitioners in the UK: A national survey*. *Complement Ther Med*. 2006;14(1):20-30.

How deep can you go when needling?

Groups of thin, medium and fat people were CAT-scanned to measure the safe needling depths for perpendicular insertion at Du14, SI15, Du5 and Du4. For example at Du14 the answers were: thin 33mm (+/-4), medium 38mm (+/-5), fat 48mm (+/-5) [i.e. they all lie between 1 and 2 inches].

Li YD, Yang SD, Li JN, Li L. *[Study on needling depth of Dazhui (GV 14), Jianzhongshu (SI 15), Xuanshu (GV 5) and Mingmen (GV 4) with CT]* *Zhongguo Zhen Jiu*. 2005;25(12):863-4. [Chinese]

Adverse event reports

Spinal haematoma

Chen JC, Chen Y, Lin SM, Yang HJ, Su CF, Tseng SH. *Acute Spinal Epidural Hematoma after Acupuncture*. J Trauma. 2006;60(2):414-416