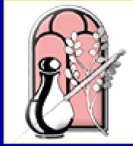

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An audit of acupuncture in a single-handed G.P. practice over one year

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Introduction:

Many audits in primary care have shown that acupuncture treatment is effective for a variety of conditions[1] and appears cost-effective by not only reducing prescribing but also referrals to secondary care[2,3]. More Primary Care Groups are now looking to see whether acupuncture should be funded in primary care not only because of its possible cost effectiveness but also to satisfy patients request for this type of treatment. To satisfy a PCG of acupuncture's effectiveness more information will be required, namely cost-benefit, manpower to provide this service and the demand by the public, which will require data on its duration of effect for the conditions treated. This study examined some of the areas of concern namely effectiveness of acupuncture treatment together with its duration of effect in a variety of conditions that presented to a General Practitioner.

Patients and Methods

The Abbey Practice is a single-handed dispensing practice with open access surgery appointments twice a day and booked acupuncture appointments for one hour four days per week. Acupuncture was performed in both open access and booked appointment surgeries.

All patients attending the practice that had symptoms relating to their condition for longer than two weeks duration were entered into this study. Altogether 140 patients aged 16 - 91 years were studied during the period December 1st 1998 - November 31st 1999. All patients were asked to complete a measure yourself medical outcome profile (MYMOP) questionnaire[4] at initial consultation. This questionnaire asked the patients to quantify the severity of up to two symptoms on a 1 - 6 scale. On this same scale patients were also asked to determine how these symptoms affected their daily activity and their general well-being. Acupuncture treatment was then given to all patients and consisted mainly of deep intramuscular stimulation, although both laser and traditional Chinese acupuncture was given on occasions.

The patients then attended at 1 - 2 weekly intervals for acupuncture treatment. If no benefit was obtained and / or symptoms worsened after 3 - 6 treatments then acupuncture was abandoned and patients referred on for other modalities of treatment where appropriate. On completion of a course of treatment all patients completed the same MYMOP questionnaire approximately two - three weeks after completing the last acupuncture treatment. Patients, in whom acupuncture was beneficial, were asked to reattend for further treatment / assessment should their symptoms return or worsen. All patients were monitored for a minimum period of 12 months (range 12 - 25 months) following their last acupuncture treatment and any further treatment documented.

The mean scores for each individual symptom, activity and well-being score were taken before and after the course of acupuncture treatment. Benefit of treatment as defined by Patterson[4] was as follows: a one-point decrease in the mean of symptoms was decreed improved. A two-point or more decrease in the mean value was decreed much improved.

Table 1

The presenting symptoms of those patients undergoing acupuncture treatment				
	Number of patients with primary or secondary symptoms (percentages in brackets)			
Anatomical site of symptoms	Symptom 1 (n =140)		Symptom 2 (n =64)	
Neck	36	(26)	16	(25)
Back	43	(31)	9	(14)
Upper limb	17	(12)	11	(17)
Lower limb	22	(17)	11	(17)
Ear/ nose/ throat	3	(2)	3	(5)
Urinary tract	2	(1)	0	(0)
Headache	16	(11)	14	(22)

Results

A total of 140 patients underwent acupuncture treatment during the study period. The symptoms at the time of presentation are shown in Table 1 although 64 patients presented with two symptoms. Patient symptoms were present for a median period of 12 weeks (range 2 - 52 weeks). The median number of acupuncture treatments given was 4 (range 1 - 10) and the duration of acupuncture treatment ranged from 1 - 20 weeks. A one-point decrease (or improvement) in the mean score of all symptoms corresponded to a 40% reduction of symptoms. A two point or more decrease in the mean score (or much improved) corresponded to a 73% improvement in symptoms. The mean MYMOP scores before and after acupuncture treatment are detailed in
Table 2

Table 2

Mean MYMOP scores in those patients benefiting and not benefiting from acupuncture treatment with percentage change from baseline in brackets								
	MYMOP SCORES							
	Baseline				Following treatment			
PATIENTS	**Symptom 1**	**Symptom 2**	**Activity**	**Well-being**	**Symptom 1**	**Symptom 2**	**Activity**	**Well-being**
All patients (n = 140)	4.36	3.74	4.17	3.21	2.61 (-40)	2.00 (-47)	2.44 (-42)	2.13 (-34)
No response (n = 43)	3.95	3.38	3.88	2.83	3.88 (-2%)	3.00 (-11%)	4.02 (+4%)	2.97 (+5%)
Improved (n = 43)	4.25	3.44	4.31	3.11	2.29 (-34%)	1.81 (-47%)	2.68 (-38%)	2.30 (-26%)
Much improved (n = 54)	4.77	4.31	4.52	3.57	1.46 (-69%)	1.49 (-65%)	1.09 (-76%)	1.31 (-63%)

Much improved benefit from treatment was found in 54 (38%), improved benefit 43 (31%) and no benefit in 43 (31%) patients. More patients appeared to benefit from treatment whose symptoms had been present for 12 weeks or less (**Table 3**). However, 26 patients (18%) still obtained benefit from acupuncture in whom symptoms had been present for more than 13 weeks (**Table 3**). Of the 97 patients who obtained improvement or much improvement after treatment 49 (50%) had a recurrence of symptoms within 18 months, the majority within 6 months of their last acupuncture treatment (see **figure 3**).

Table 3

Duration of symptoms and response to treatment in those benefiting and not benefiting from treatment						
Degree of response	**Duration of symptoms**					**Total number of patients**
	2/52	**4/52**	**5-12/ 52**	**13-26/ 52**	**>52/52**	
0	-	11	13	9	10	43 (31%)
>1.0 – 1.9	5	16	9	6	7	43 (31%)
>2	3	26	12	5	8	54 (38%)
Total number of patients (%) responding to acupuncture treatment	8/8 (100%)	42/53 (79%)	21/34 (62%)	11/20 (55%)	15/25 (43%)	

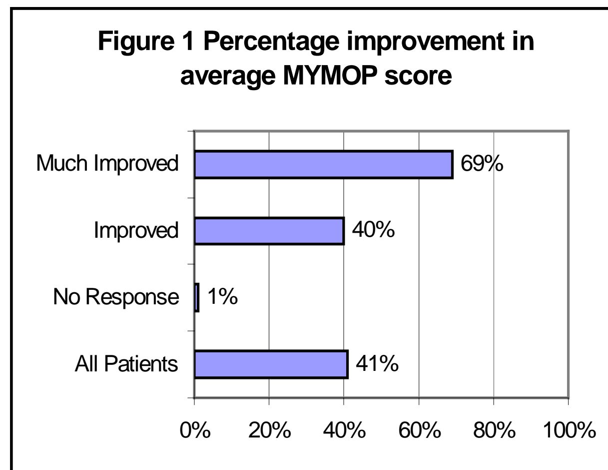
Of the 43 patients that did not respond to acupuncture treatment 16 were referred on to other departments, namely orthopaedic (12), pain (1), rheumatology (1) and physiotherapy (2). A further two patients were injected with corticosteroid for their plantar fasciitis and their symptoms resolved. The others were treated by alteration of their analgesia or mood altering drugs.

In those patients that benefited from treatment the mean MYMOP scores for symptoms, activity and well being all appeared to decrease. The decrease in scores was more apparent for individual symptoms and activity and less so for well-being. No change in any of these scores was seen in the patients that received no benefit from treatment (see
Table 2).

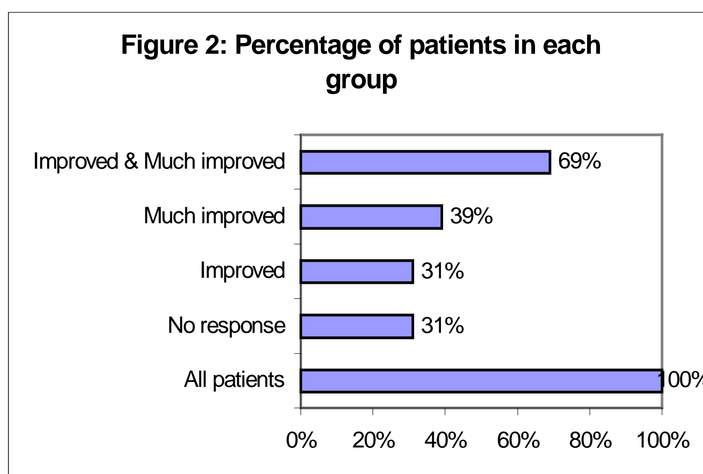
Discussion

This audit has confirmed the findings of other practitioners that patients benefit from treatment with acupuncture, although in this study the majority of patients treated were suffering from musculo-skeletal symptoms, which commonly present in primary care. The

audit did appear to show that patients with the shorter duration of symptoms were more likely to benefit from acupuncture treatment than those with more chronic symptoms, i.e. greater than 12 weeks. This raises several points, namely whether those patients with shorter duration of symptoms are likely to become asymptomatic even if no treatment was given, or if patients are left symptomatic for greater than 12 weeks are likely to develop chronicity of symptoms and less likely to respond to acupuncture treatment as the results would suggest. Another possibility is that those patients with longstanding symptoms may have idiopathic or neurogenic type of pain which is less likely to respond to treatment than those with nociceptive pain[6]. This study did not discriminate the types of pain treated.

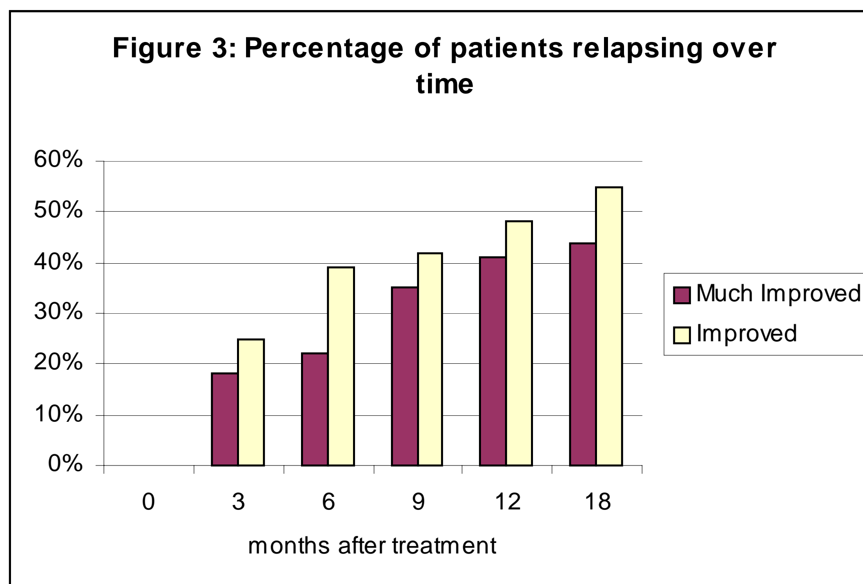


Another finding in this study was that those patients that benefited from treatment also showed a high relapse rate of symptoms with 50% patients returning for consultation usually within 6 months of their last treatment. This high relapse rate at 6 months was also found in a study of patients with chronic pain treated by acupuncture[5]. This may be partly explained by the fact that the majority of patients presenting with musculo-skeletal problems are more likely to have a chronic underlying condition such as osteoarthritis. The recurrence of symptoms would be as a result of an exacerbation or worsening of the underlying condition. However it may be as a result of a wearing off of the analgesic healing-effect of the acupuncture treatment. Shorter duration of effect of acupuncture has also been seen in neurogenic or idiopathic pain and may account for these findings[6]. The implication of this finding to primary care physicians is enormous, for if patients benefiting from previous acupuncture are reluctant to take drugs for their condition, they are



more likely to re-consult and ask for further acupuncture treatment. This appears to be the case in this practice where the resultant increased workload for acupuncture treatment has resulted in a change of working practice, namely reducing the patient list size and obtaining monies from the PCG group for provision of acupuncture to these patients. The money obtained has compensated to some degree for the loss of income as a result of the reduced list size and increased workload. Primary care physicians in future, before bidding for acupuncture contracts, should be aware of this scenario and cater accordingly.

Although only 18% of patients with long term symptoms of greater than 12 weeks benefited from treatment it would still suggest that acupuncture does have a role to play in treating these conditions, albeit a small one. Of the 18% of patients benefiting from treatment 38% of these still remained asymptomatic 12 months after their last treatment.



On comparing those patients that benefited from acupuncture and those that received no benefit there appeared to be no change in well-being other than that associated with their reduced symptoms and activity score. Certainly in those patients not benefiting from treatment, no change in well being scores were noted following acupuncture treatment. Does this lay to rest the assumption made anecdotally that acupuncture may work by increasing well-being as opposed to reducing symptomatology and / or increasing normal everyday activities. Perhaps this aspect needs further research.

In conclusion, the findings of this audit would suggest that patients be treated as early as possible even though it may be possible that these patients could recover naturally. Offering acupuncture to

those patients with predominantly nociceptive pain is more likely to lead to better and longer beneficial effects of this treatment. Furthermore offering acupuncture treatment routinely will result in increased consultation rates for this treatment and tie up physician time. This increased workload and the financial implications need to be addressed both by acupuncturists, primary care groups and other health care workers before widely offering this type of treatment routinely in primary care.

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