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Specific Irritability of Acupuncture Points as an Early Symptom of Multiple Sclerosis

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Abstract: 28 patients suffering from multiple sclerosis were treated by acupuncture. The age of the patients ranged from 24 to 60 yr. Results of the treatment were satisfactory, but remarkable spontaneous remissions, characteristic for this illness, make any treatment difficult to evaluate. In this article the peculiar behaviour of all treated patients is described: increased sensibility of the skin over the acupuncture loci, while insertion of the acupuncture needles provoke spasms, clonus and even tonic-clonic contractions of the muscles of the extremities. This phenomenon is very specific and can be used as an early sign of this ill-fated illness.

THE ETIOLOGY OF MULTIPLE SCLEROSIS (M.S.) is still unknown, therefore it is not possible to treat this disease causatively. Field (1969) has suggested that M.S. belongs to the group of so-called "slow virus disease". M.S. is common in the temperate zones, and rare in the tropics. It seems that the individual's chance of developing the disease depends on where he spent his childhood; that is, an emigrant from a high-risk to a low-risk area retains the high risk, and vice versa. These facts could be explained by supposing that a common virus infection, causing trivial symptoms followed by lifelong immunity in infants, is liable to cause M.S., if the infection occurs around the age of 15 (1).

Nowadays it is generally accepted that immunological factors play an important role in the forming and development of the clinical picture of M.S. Even the plaques, the characteristic lesions in the central nervous system in the acute phase of the illness, has an immunological base (2). Generally, weakness in the lower extremities in young persons with increased deep reflexes, a positive Babinski and absence of abdominal reflexes must awaken suspicion of an early stage of M.S. However, disseminated patches of demyelination in the brain and spinal cord can provoke every possible neurologic symptom, so there does not exist any one isolated phenomenon pathognomonic for M.S. A history of remissions and

exacerbations is the most important confirmation, but various other disorders can be taken into account in differential diagnostics.

The valid rule is, that a definitive diagnosis can be made only when all other pathologic processes are excluded, which by its localisations, signs and symptoms can form an even clinical picture.

The course is variable: some patients have frequent attacks and are incapacitated rapidly, while others have remissions for as long as 25 yr. No specific therapy is known. Spontaneous remissions make any treatment difficult to evaluate (3). The same can be said for acupuncture treatment, so this article is not concerned about the success of therapy, but about the very specific reaction of the patients during and after insertion of the acupuncture needles.

Patients and Observations

During the 8 year period (1977-1984) 28 patients suffering from M.S. were treated by acupuncture. There were 22 women and 6 men in the age range of 24-60 yr. Success can be evaluated as realistically-optimistic. The treatment was in the same manner as post-poliomyelitis sequelae, as I saw in the People's Republic of China, since Chinese physicians claim that in China M.S. is an extremely rare illness. The characteristic reaction of the patients during the therapy can be summarized as follows:

1. Acupuncture points were markedly irritable, especially from the waist down and in the lower extremities. It is quite enough to touch the patient's skin with some sharp tip, for instance with a toothpick tip, to provoke the very clear "te-chih" (deqi) effect, if the skin is touched within a millimeter precisely over the acupuncture loci. Due to this peculiar sensitivity it is very easy to find every single acupuncture point, even by an inexperienced doctor.

2. Insertion of the needle into the acupuncture loci provokes the very strong "te-chih" feeling. In some points, variously from patient to patient, reactions are turbulent. Spasm of the punctured muscle spreads rapidly on the whole group of muscles, or on the whole of the lower extremities, with dorsal extension of the thumb.

3. In advanced stages of the illness insertion of the needle provokes rhythmic contraction of the whole lower extremity, followed by tonic-clonic contractions, ten to twenty seconds. The spasms are very forceful, in many cases the needle remains bent and improper for further use. This effect can be reinforced if electric current is applied in the inserted needles. The patient can not prevent the spasms and involuntary lifting of his leg, while the needles are inserted. These movements can be provoked even if the extremities are completely paralyzed.

Discussion

Acupuncture initiates a very complicated mechanism, by which various bio-informative substances are secreted. The scheme and number of acupuncture loci are fixed at every biological type, unrelated to age and gender. It is not in harmony with the theory of evolution, but it is fact! In traditional Chinese medicine

IRRITABILITY OF ACUPUNCTURE POINTS AS SYMPTOM OF MULTIPLE SCLEROSIS

"te-chih" is considered essential for ensuring the curative effect of acupuncture. This rather obscure term admits of two different interpretations. On the part of the patient it refers to the particular subjective feeling experienced in the region being needled, often is described as a combined deep sensation of soreness, heaviness, tightness and swelling. On the part of the acupuncturist it means the manual feeling of resistance or palpable motions of the impaling needle in the tissue during the maneuver, in which the needle is felt to be caught or sucked in by something in the tissue. It is assumed that the manual feeling experienced by the manipulator and probably some of the subjective feeling of the patient are produced by the contraction of the muscles in the punctured region (4).

Bossy (1978) has pointed out that Chinese medicine presents the concept of the acupuncture point as an "opening", or a "hole". Indeed, this is the meaning of the word "xüe". It would seem as though the acupuncture locus is the site where a hole occurs not only in the deep fascia, but also in the dermis as well, due to passage of a periferal nerve or neurovascular bundle. At least two holes thus overlie or correspond to each other. The hole in the deep fascia may be due to a perforating vein, or a neurovascular bundle, or a nerve alone (5). From the close relationship between the muscle potential and the acupuncture sensation, it is reasonable to assume that impulses from the muscles must play a part in the production of the acupuncture sensation, although the other receptors in the deep tissues may also be involved—such as those in the connective tissue, fascia, sarcolemma and the wall of small blood vessels. Thus the acupuncture sensation is in reality the inflow of compound impulses arising from various receptors in the deep tissues in the region of the acupuncture points (6).

The nature of the acupuncture sensation seems to vary with the point of stimulation and the receptors activated in different tissues by needling. If the needle-point touches the periosteum, the aponeurosis, the sheath of a tendon or a ligament, the sensation of "soreness" will be produced. Contraction or increased tension of muscle will result in sensation of "heaviness" or "distension". "Numbness" is usually produced by direct stimulation of a nerve trunk or a nerve branch. Stimulation of perivascular nerve plexus will cause pain. In spite of the fact that the anatomic identity of acupuncture points has yet to be clearly established, practically all of the sensitive points on the skin are identical to acupuncture points in their location. Trigger points, motor points, dermal puncture points, skin sensitive points and acupuncture points are probably the same anatomical identities under different names (7). In the last 20 years various aspects of the neurophysiologic mechanism underlying acupuncture analgesia have been investigated. Nowadays we have identified more or less: peripheral afferent pathway (8) ascending pathway in spinal cord (9) and certain neurons in the brain stem and the thalamus. So we know that acupuncture analgesia is essentially a function of the central nervous system, resulting from the inhibitive interaction between the afferent impulses arising from the point of acupuncture and those from the site of pain in the brain, especially in the thalamus (10). A number of works try to explore the descending pathway mediating the inhibitory effect, i.e. the ways in which the inhibitory action is carried out (11).

Demyelination in the brain and spinal cord, what pathologically characterized multiple sclerosis, changes sensitivity of the acupuncture points, raises it up to a higher level. Needling of acupuncture loci provoke the turbulent response: spasm and clonus. This phenomenon appears exclusively at multiple sclerosis and is not seen in any similar diseases. This unmistakable sign is present in the early stage of the illness, which is very important, because in too many cases months or even years passed before the disease is recognized. Practice confirmed it: in 6 patients (among the group of 28) the definitive diagnosis was reached upon request and urging of the acupuncturist!

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