

WHAT IS ACUPUNCTURE?

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'There aren't any miracles, only undiscovered laws'.
Ancient Chinese saying.

INTRODUCTION:

In Latin, 'ACUS' means needle and 'PUNTURA' means penetration or prick. Acupuncture is an ancient Chinese art of healing wherein specific types of needles are inserted at specific points. There are more than 1,000 acupuncture points in the human body located along 12 main pathways or channels in each half of the body, and two channels in the midline of the body. To treat a given case, an acupuncturist has to select about 8-12 points out of 1,000 known points; thus the needles are not the deciding factor but it is the precise area of their application, which will produce the desired beneficial effect.

According to Chinese philosophy, the human body is governed by Qi (CHI= life force) which is continuously circulating along the acupuncture channels. This Qi consists of two dynamically opposite yet harmonizing energies called YIN and YANG. YIN signifies the female and negative energy while YANG signifies the male and positive energy. In health, YIN and YANG are in perfect balance. Any imbalance between the two is disease. Through needling the acupuncturist balances the energy, resulting in a cure.

All the acupuncture points on the body are located by first taking the patients' CUN. A CUN is the distance between the middle two creases of the middle finger or the breadth of the thumb at the level of the horizontal crease.

On an average 10-20 treatment sittings are required depending upon the severity and duration of the disease. Paralytic cases require a much longer treatment. A sitting may last from 15-30 minutes.

PHYSIOLOGICAL EFFECTS.

There are six major effects produced by needling.

1. ANALGESIC AND ANAESTHETIC EFFECT.

Acupuncture needling raises pain threshold through:

(a) Sensations arising out of this needling compete with the painful stimuli, reach the spinal cord first and block the incoming painful sensations (Gate control theory), Thus producing analgesia..

(b) By needling, certain chemicals and neurotransmitters (e.g., endorphins and enkephalins) are liberated in the body which bind themselves with the specific receptors in the brain to block the painful sensations (endorphin/enkephalin release theory).

2. SEDATION:

Some people feel drowsy or even fall asleep during treatment.

3. HOMEOSTATIC OR REGULATORY EFFECT.

Vital functions like respiration, heart rate, blood pressure, metabolic rate, sweating, body temperature etc whether high or low, can be brought to normal with the help of acupuncture.

4. IMMUNE-ENHANCING OR ANTI-INFLAMMATORY EFFECT:

Stimulation of certain specific acupuncture points causes an increase in the number of healthy white blood cells, antibodies, gamma globulins etc, thereby raising body resistance to disease.

5. PSYCHOLOGICAL EFFECT.

Though acupuncture does have a psychological

component, it is not akin to hypnosis or autosuggestion.

6. MOTOR RECOVERY:

Acupuncture hastens motor recovery or stimulates non-responding muscles to improve functions. Therefore, it is very useful in paralytic conditions.

REFERENCES FROM MEDICAL TEXT BOOKS.

1. Text book of Medical Physiology by Guyton (6th edition, page: 616)

'Stimulation of large sensory fibers from the peripheral tactile receptors depresses the transmission of pain signal either from the same area of the body or even from areas sometimes located many segments away. This mechanism is the basis of pain relief by acupuncture. Several clinical procedures have been developed recently for suppressing pain by stimulating large sensory nerve fibers. The stimulating electrodes (acupuncture needles) are placed on selected areas (acupuncture points) of the skin, or on occasion they have been implanted over the spinal cord to stimulate the dorsal sensory columns; dramatic pain relief has been reported'.

2. Clinical Medicine (A textbook for medical students and doctors) By Parveen J. Kumar (Page: 813)

'The gate theory of pain suggests that pain sensation is altered by other afferent impulses (e.g. touch, pressure, vibration) which enter the spinal cord and have a gating or inhibitory effect on impulse transmission. Local heat and transcutaneous electric stimulation (Electro-acupuncture) are sometimes useful in the management of chronic pain'.

3. Harrison's principles of internal medicine (11th edition, Page: 13, 379-382)

'The induction of analgesia by acupuncture may be mediated by endogenous opiate peptides. In some studies, increased cerebrospinal fluid levels of endorphins accompany the induction of analgesia by acupuncture whereas co-administration of naloxone (the opiate antagonist) blocks acupuncture mediated analgesia.

a. Biological effects and possible roles of endogenous opiates (endorphin and enkephalin);

Analgesic, catatonic-like state, seizures, appetite control, temperature regulation, reproductive function (endocrine), sexual behaviors, blood pressure decline, stress response, release of hypothalamic/pituitary hormones, memory alteration, regulation of respiration, modulation of immune response.

b. Endocrine effects of endogenous opiate peptides:

Endogenous opiate peptides (released by Acupuncture) produces an increase in the secretion of growth hormone, prolactin, insulin and arginine vasopressin, and a decrease in the secretion of ACTH, Cortisol, luteinizing hormone (LH), follicle-stimulating hormone (FSH), antidiuretic hormone (ADH) and somatostatin.

Beta-endorphins may play a regulatory role in the normal menstrual cycle, and in puberty. In addition to brain and pituitary, the pro-ACTH/endorphin precursor systems are present in the ovaries, testes and placenta, suggesting a role for endogenous opiates in reproduction. Regions of brain associated with the limbic system contain substantial quantities of immunoreactive beta-endorphins, suggesting a role in memory, learning and emotions.

The release of enkephalins inhibits release of substance P, a neurotransmitter that mediates pain, from different fibers entering the dorsal horn.

Opiate receptors are present on human granulocytes, lymphocytes and monocytes. Opiate peptides stimulate human macrophage chemotaxis, inhibit or increase lymphocyte proliferation and variable affect on natural killer cell activity.

INDICATIONS OF ACUPUNCTURE / WHO RECOMMENDATIONS:

The World Health Organization (WHO) has recommended acupuncture treatment in more than 52 diseases and it was also recognized by the UNO Resolutions No. 35/55/xii/80 of August 15, 1988.

WHO recommends acupuncture for the following diseases:

Acute sinusitis, common cold, rhinitis, acute bronchitis, bronchial asthma (especially in children), acute conjunctivitis, central retinitis, myopia in children,

cataracts (without complications), toothache, post-extraction pains, gingivitis, acute and chronic pharyngitis, hiccups, spasms of oesophagus and cardia, gastroptosis, acute and chronic gastritis, gastric hyperacidity, pain relief for chronic duodenal ulcer and acute duodenal ulcer (without complications), acute and chronic colitis, acute bacillary dysentery, constipation, diarrhoea, paralytic ilius, headache, migraine, terminal neuralgia, facial palsy in its early stages, paresis following a stroke, peripheral neuropathies, sequelae of poliomyelitis in its early stages, Meniere's disease, neurogenic bladder dysfunction, bedwetting, intercostal neuralgia, cervicobrachial syndrome, frozen shoulder, tennis elbow, sciatica, low backache and osteoarthritis.

Obesity, excessive sweating, smoking, alcoholism, beetle chewing, allergy (dust, pollen etc), impotence, acne and depression can also be treated by acupuncture.

SIDE-EFFECTS OF ACUPUNCTURE:

In expert and experienced hands, there are hardly any side effects because no medicine is applied on the needles. Sometimes minor bleeding, pain or fainting may be encountered.

CONTRA - INDICATIONS OF ACUPUNCTURE:

Acupuncture is contra-indicated in mechanical obstruction, frank surgical cases, cancer, bleeding disorders, congenital disease severe infections etc.

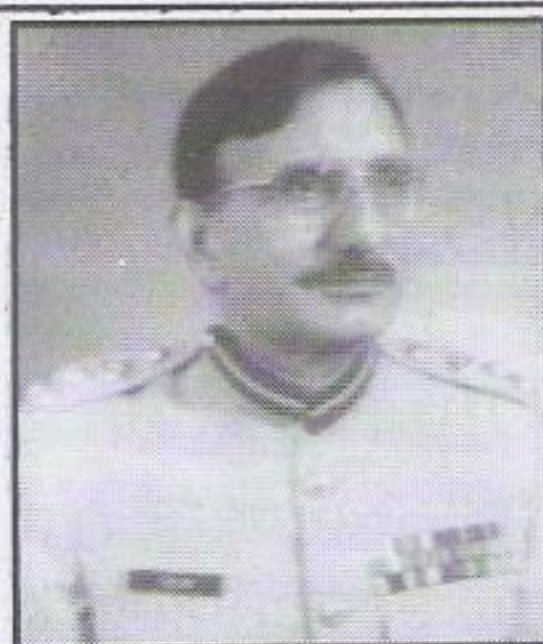
PAIN CLINIC

The Nobel Institute, Stockholm, Sweden, which awards Noble prizes for work in physics, chemistry, medicine, literature and the promotion of peace, has established a Pain Clinic with acupuncture since 1982.

In a pain clinic a family physician, an anaesthetist and an acupuncturist work together for better control of pain and painful conditions. It is a new idea in Pakistan. By starting a pain clinic in every hospital, we can extend great service to the suffering humanity. Let us join together to help people to get rid of pain and to start a pain-free life. Pain is the worst experience ever felt by a patient. Even mild pain of longer duration can lead to depression and a suicidal attempt. Working together in a pain clinic, the reward one gets, may only be a relieved and happy patient's smile.

REFERENCE:

Acupuncture Treatment & Anaesthesia
5th Ed. 2001 by Dr. M. Salim



Brig. M. Salim (retired) is a highly qualified and eminent scholar in the anaesthesiology and pain circles. He has acquired all the academic diplomas in anaesthesiology from Pakistan, and is a fellow of Royal College of Anaesthetists, England. He was also awarded a diploma in acupuncture. He has been Dean of Faculty of Anaesthetists, CPSP. He remained Advisor in Anaesthesiology, and contributed a lot towards establishment of the specialty of anaesthesiology in Armed Forces. Presently he is Professor of Anaesthesiology in Islamic International Medical College.