

The Use Of Acupuncture in the Emergency Room

By Alessandro Cecconi

Abstract: Emergency Room (ER) doctors often have to deal with severe cases requiring timely intervention and the use of drugs that work fairly rapidly. There would appear to be no space for Chinese medicine in general and acupuncture in particular in this context, thanks to the idea that this kind of medicine requires more time to act. This article describes the use of TCM in the ER. Through the description of several cases, the author wishes to show that acupuncture can be effective, either alone or in combination with western medicine, both for the diagnosis and the treatment of conditions that are generally encountered in emergency centres and are not normally treated in private TCM clinics.

Keywords: ER, acupuncture, kidney stones, hypertension crisis, epistaxis, atrial fibrillation, leg ulcers

Introduction

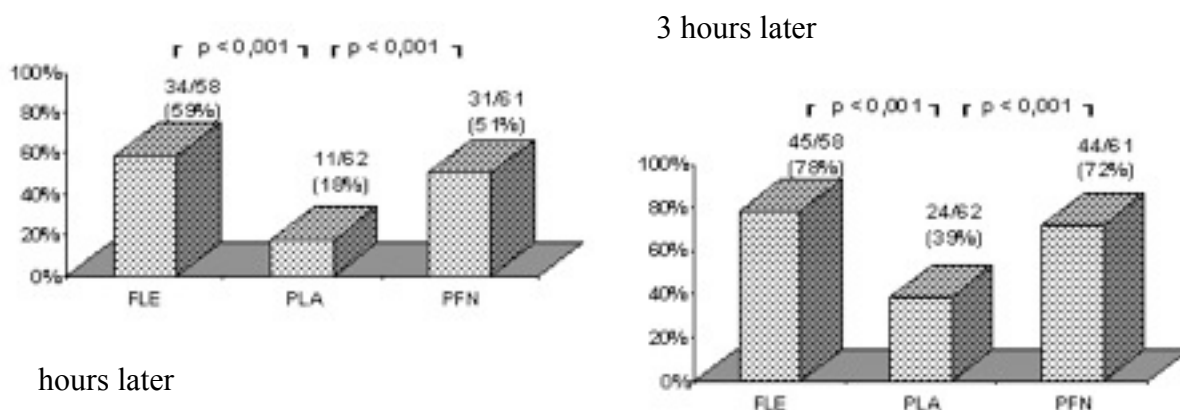
The ER does not only attract severe cases such as patients with myocardial infarction, heart failure and multiple traumas; it also sees, and fortunately these are the majority of cases, less serious diseases such as renal colic, high temperature, acute headache, acute back pain, acute bronchitis, stiff neck, minor wounds, cardiac arrhythmia, insect bites and so on. In many of the latter cases, acupuncture can not only provide valuable help, but moreover provide a cost saving on the administration of drugs (for example NSAIDs, migraine relief, pain relief), drugs which are not without harmful side effects, and on medical tests.

I remember a patient who came into the ER complaining of numbness of the tongue and the left side of his face. People who work in the ER tend to look at things 'pessimistically', in the sense that they first consider, and then exclude, medical conditions that require urgent intervention. In this particular case, the first thought was cerebral stroke. Without my knowledge of Chinese medicine, I would probably have immediately ordered an x-ray of the spinal column, to rule out spinal problems and possibly a CAT scan to rule out stroke. Blood pressure, oxygen saturation, heart rate and physical examination were all normal. However, upon closer examination, the patient reported that he had traveled by car with the window open for a long stretch. Taking into account that the tongue showed no particular changes apart from a slight tremble at the tip and that the pulse was FU (superficial), I thought of an external aggression of wind dampness in the meridians of the bladder, gall bladder and stomach. I pricked the 20 GB together with 3 SI, 4 LI, 5 TE and 60 BL (reducing technique), and the tingling was gone in 20 minutes. A knowledge of TCM allowed me to make a differential diagnosis, carry out an effective treatment and save on expensive diagnostic tests, that carry some risk, and would have been inappropriate in this particular case.

I have been working in the ER as a doctor for five years in two small towns in Marche, Montegiorgio and S. Elpidio a Mare. In the past five years I have used somatic and auricular acupuncture to treat a range of problems including scapular-humeral periarthritis, sciatica, acute lumbago, vertigo, acute hypertension, renal colic, panic attacks, severe headaches, contusions and sprains, serious wounds and atrial fibrillation. In most cases of periarthritis of the shoulder, acute low back pain, sciatica, dizzy spells, panic attacks and headaches, acupuncture alone suffices to alleviate symptoms. In hypertensive crises, renal colic and atrial fibrillation, acupuncture was used in combination with western medicine. The combination of

TCM and western medicine helped reduce the dosage of pain medication for colic and of high blood pressure medication for hypertensive crises, and restored sinus rhythm in the case of atrial fibrillation in 100% of treated cases (six in total) within two hours of the start of treatment integrating acupuncture with western AF protocols. It should be noted that, although the number of cases of AF treated by me is too small to be statistically significant, one study (1) suggests that usually about half of patients treated just with propafenone (an antiarrhythmic drug) return to sinus rhythm after 2 hours, and 72% after 8 hours.

Percentage of cardioversion of recent onset atrial fibrillation after oral loading with flecainide (FLE) (300 mg) or propafenone (PFN) (600 mg). Control with placebo (PLA) (1).



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1. Capucci A, Boriani G, et al. Conversion of Recent-Onset Atrial Fibrillation by a Single Oral Loading Dose of Propafenone or Flecainide. Am J Cardiol 1994, 74:503-505

Cases treated in the ER

Atrial fibrillation

Atrial fibrillation is a heart rhythm disorder in which the sinoatrial node is no longer the primary pacemaker. The atria contract irregularly and inefficiently, increasing the risk of ischemic stroke through the formation of blood clots in the atria and hemodynamic decompensation through reduced ventricular volume due to ineffective atrial contraction. Symptoms can be: palpitations; dyspnea; excessive urinary frequency; chest pain; and dizziness. Treatment in western medicine aims to slow the heart rate, if this is raised, to provide a more sustainable heart rate and restore sinus rhythm, through electrical cardioversion with a defibrillator, or antiarrhythmic drugs.

In Chinese medicine, AF is related to an alteration of the Heart Qi and may arise from:

- heat or fire invading the heart;
- tan heat;
- LR and Heart Blood stasis;
- LR and Heart Blood deficiency;
- HT Qi deficiency;
- HT Yang deficiency;
- HT-KI disharmony

The differential diagnosis is based, as always, on the symptoms that accompany the change in rhythm, the pulse and the tongue. In general, in the presence of heat or kidney-heart disharmony, heart rate is accelerated. With blood stasis the main symptom is stabbing chest pain and there may be signs of cardiac insufficiency where there is HT qi and yang deficiency (peripheral edema, dyspnea, marked asthenia, sweating with minimal exertion, pallor). The priority is to restore sinus rhythm, where atrial fibrillation has started within the previous 48 hours. Otherwise, the patient's blood should be thinned for one month before being electrically cardioverted. In these cases, acupuncture is a supportive therapy and should not be used in isolation. In all cases, I treated with Propaphenon but added 6 PC for 20 minutes, using reducing technique (Xie) for excess syndromes (Shi) and reinforcing technique (Bu) for deficiency syndromes (Xu). 6 PC can purify heat, move the blood (being a Luo point) and regulate the Heart Qi. In all cases, normal heart rate was restored within two hours of starting the treatment.

An 85-year-old woman, a relative of mine, had been hospitalised in the ER for a recurrence of atrial fibrillation. She had been under observation for four hours, following unsuccessful routine treatment with Propaphenon, when I arrived. I massaged Neiguan P-6 for a couple of minutes on alternate arms, and after a few minutes sinus rhythm returned, to the amazement of myself, my family and my medical colleague.

Hypertension crisis

Hypertensive crises are medical emergencies characterized by a rise in blood pressure above 160/95 mmHg. The risk is that a cerebral blood vessel will rupture, with hemorrhage and stroke. The risk factors are age, obesity, family history, diabetes and diet. Symptoms can be: headache; epistaxis; feeling of warmth in the head; dizziness; tinnitus; feeling of heaviness in the head; and mental confusion. Emergency treatment in western medicine is based on diuretics and calcium channel blockers.

In Chinese medicine hypertensive crises are linked to excess to the head. The head is known as the "palace of yang", so that the yang normally rises to open and illuminate the orifices, and then "grows heavy" and descends again. Conditions that may cause a hypertensive crisis are:

- KI and LR Yin deficiency, with corresponding excess yang (with possible wind);
- LR Qi stasis with fire heat (with possible wind);
- dampness heat;
- tan heat.-

In an emergency, the points used were:

- Yin deficiency with escaping yang: 3 LR (lowers excess yang), 20 GB (eliminates liver wind at the head), 20 GV (purifies heat and wind from the head), 1 KI in moxa (draws yang down following the principle that "a small fire attracts a large fire"), 5 TE (purifies heat and expels wind). All points were inserted bilaterally for 20 minutes and manipulated using reducing technique.
- Qi stasis with heat: 2 LR (purifies LR fire and mobilizes the Qi), 43 GB (water point, "cools" the head and purifies heat), 1 KI in moxa; 20 GB. All using reducing technique.

For cases related to dampness heat and tan heat, you do not work on the dampness or the tan in an emergency, because treatment of these pathogens requires more sessions. So work is directed at the heat, purifying it with the points shown above. It is generally better to incorporate diuretics such as Furosemide in these cases as, in activating diuresis, they drain dampness. This should not be considered in cases where the yang escapes thanks to yin

deficiency, since this facilitates the expulsion of fluids and may increase the gap between yin and yang, exacerbating the crisis.

MF, 62, had been complaining of a throbbing headache in the temples and of feeling confused for about six hours. His face was flushed. His tongue was purple and red at the tip and had a thin dry yellowish patina.

Pulse: HUA, Shuo, Youli

Blood pressure: 190/120 mm Hg

Heart rate: 92 bpm

Oxygen saturation: 96%

Chinese diagnosis: LR Qi and blood stasis, with release of heat.

Treatment principles: Purify the heat from the head.

Points: 20 GB, 43 GB, 1 KI moxa, 5 TE, bilateral, using reducing technique for 20 minutes.

Three drops of nifedipine were added to accelerate the rebalancing process. After 40 minutes the pressure and symptoms normalised.

Kidney stones

Renal colic is a condition that patients describe as being extremely painful: the pain typically originating in the left or right renal lobe; it is either a stabbing pain or feels heavy and radiates in the lateral iliac crest to the groin. There is no position that alleviates it. The pain is due to spasms in the urethra as it tries to expel the stone in the bladder. The stone may be calcium oxalate, calcium phosphate or struvite. The condition may be associated with nausea or vomiting, a feeling of heaviness above the groin, bloating, urinary burning, excessive urinary frequency and strangury. The Giordano manoeuvre (percussion with the medial aspect of the hand into the affected kidney lobe) is generally positive, just as is urine stick positive for leukocytes, red blood cells, nitrites and nitrates makes the diagnosis more probable.

The therapy is based on painkillers and antispasmodics.

In Chinese medicine kidney stones are aggregates of tan material that are deposited in the kidneys. In renal colic, the tans obstruct the flow of Qi and Blood within the kidney meridian, causing the characteristic pain. The pain is very strong because this is a very delicate area, near the Zang Kidney, so the pathogen must be eliminated as soon as possible as it risks the functioning of the Zang.

Auricular acupuncture is used as a treatment in the ER. The more useful points are: the Kidney, Liver, Bladder, Urethra and Shenmen. I have observed that the Liver point is particularly important if the pain radiates to Jingmen GB-25, the front mu point of the Kidney. The choice of auricular points is based on the sensitivity of the point to pressure by the tip of the needle. Needles are inserted into the most sensitive points, selected from those mentioned above, and left for 30 minutes. The position of the needles should be changed with changes in the symptoms, always testing for sensitive points nearby, which relieve the pain.

SN, 41, came to the ER after two hours of pain in the sn renal crest, radiating to 2-3 CV. The pain was stabbing, as with colic, and accompanied by vomiting. Vomiting is typical of colic, because if there is a blockage, that is fullness below, the Stomach Qi descends and, faced with an obstacle, hits it and then goes against the flow (Qini). Moreover, this movement can be interpreted as an attempt to create a "vacuum" to relieve the excess. As treatment, he had taken a vial of intramuscular ketoprofen at home, without any improvement.

Tongue: dark, with a diffuse, viscous white patina

Pulse: markedly Xian

Diagnosis: Qi and Xue stasis in the Kidney meridian.

Therapy: auricular acupuncture of the Kidney, bladder and urethra, first testing the sensitivity of the acupoints. The needles (0.25 x 25mm) were manipulated in reducing technique every five minutes for 30 minutes and relocated when the pain varied in location and intensity, looking for other sensitive spots. It should be emphasised that if the point is sensitive, simply placing the needle there causes symptoms to immediately improve by 30 to 70%, even if this effect is not permanent at the beginning of the treatment.

After 30 minutes the pain had completely regressed. In addition, two vials of Di fluoroglucinol were taken (a urinary antispasmodic) to accelerate the rebalancing process.

Panic attacks

Panic attacks are a very common disorder, especially in young adults. They are characterized by palpitations, marked anxiety, panic, a feeling of impending death, breathlessness, numbness in the limbs, tremors, a sensation of diffuse or localized cold or heat and lumps in the throat. Trauma and unresolved emotional shocks are often at the root of the problem. This is a common cause of visits to the ER. There's a story behind every person, behind every symptom, a set of experiences, often traumatic, relating to sexual abuse, harassment or road accidents, experiences that have left a scar, that are still active for many people, that fuel these symptoms, which are too often ignored by doctors, often for lack of training about them, and dismissed with a few drops of an anti-anxiety drug. In the emergency department there is often not enough time to talk to people, especially in times of high traffic, and, moreover, it is often the patients themselves who asks that the symptoms be taken away as quickly as possible. Allowing people to express and unburden themselves, giving them control through listening and speaking to them, is in many cases enough to calm them down. We all need to feel contained, to feel welcomed and accepted. Yet we have become accustomed to being strong and brave, to not expressing our weaknesses, to hiding them in fact. But the more we hold ourselves in, the more likely we are to "explode". In fact, according to TCM, panic is caused by an intense and chaotic movement of energy, often similar to an explosion that is difficult to contain and control.

Specifically, the syndromes related to panic are:

-LR Qi stasis, with heat invading the heart. One of the functions of Qi is to keep things in check. When much of our energy is being used to hold back emotions rather than letting them out, this creates an ambivalent movement: on one hand the Qi tries to keep the emotions in, on the other the emotions (which give energy movement) are trying to move the Qi. This creates a friction that results in a consumption of Qi and a build-up of pathogenic heat followed by chaotic energy circulation, resulting in symptoms such as panic. In some cases the Tan (the expression and cause of the stagnation) may complicate the picture by increasing energy and blood stagnation and preventing the Shen from taking root and flowing smoothly with the blood. In addition to panic there can also be a feeling of numbness or difficulty speaking, or more severe dissociation syndromes such as hallucinations and manic disorders.

Ben Tun syndrome is often found at the source of the panic, characterized by a feeling of energy movement that rises up in the throat or face, with palpitations, breathlessness and panic, which regress within a few minutes. This pattern can be caused by stagnation of the Liver Qi producing heat that rises to disturb the flow of Qi and blood in the heart, or deficiency of the Kidney and Liver Yin with excessive Liver yang that rises to affect the Heart. In this case Yintang (M-HN-3), Guanyuan REN-4 (Bu technique), Dazhong KI-4 (bu technique), Qimen LIV-14 (xie technique) and Benshen GB-13 (xie technique) points are used. Qimen LIV-14 and GB-13 Benshen mobilise the Qi, especially in the chest, and together with Dazhong KID-4 reduce fear, calm the Shen and improve breathing. Guanyuan REN-4 is a specific point for Ben Tun syndrome, as it nourishes the blood and Yin and anchors the Shen.

M.C., 38, a lorry driver, arrived at the ER in the middle of a panic attack. He was sweating and extremely agitated, had complained of difficulty breathing. His eyes were very red and scared-looking. His tongue was red, with red edges and a diffuse viscous yellow patina.

The pulse was Hua and Shuo.

Diagnosis: heart fire with Tan.

Therapy principles: move the Qi and blood to eliminate stagnation.

Points: 3 LR, 4 LI, Yintang, bilateral, xie technique, for 20 minutes.

The panic began to decrease after five minutes of treatment, regressing completely in 30 minutes.

The points used do not remove the heat, but move the Qi and blood. As a panic attack is a chaotic circulation of the Qi, the 4 barriers restored a more harmonious flow of the Qi. Heat is the source of the anxiety because it agitates and alters the flow of the Qi. You can therefore work on purifying the heat or on moving the Qi. Further, moving the Qi and blood also favours the dispersion of heat.

Leg ulcers

In the case of wounds that have difficulty healing, such as in diabetics or the elderly, it is useful to surround the healthy edges of the wound with needles. The number depends on the size of the wound. I have observed that this facilitates healing. I had an injury to the Achilles tendon that, after one month, had not healed and was suppurating. A colleague of mine suggested surrounding the wound with needles, and after 10 daily applications the wound began to close and no longer secreted pus. It closed after 20 days. I believe that the function of the needles around the wound was to promote the circulation of Qi and blood and purify the toxic heat.

Epistaxis

Epistaxis is bleeding from the nose. The causes can be linked to hypertensive crisis, trauma and impaired blood clotting. Treatment in western medicine is based on oral procoagulants and ice.

In Chinese medicine nosebleeds can be caused by:

- Heat invading the lung
- Qi deficiency
- Blood stasis

In the case of heat invading the Lung, Liver fire is often the source of the heat. In liver fire hypertension, the body gets rid of the excess heat through bleeding. So in these cases it is a mistake to stop the bleeding with oral anticoagulants, unless bleeding is massive.

The blood is bright red, the tongue is red with a patina, and the pulse is SHUO and HUA.

The key point for treating this type of nosebleed is 3 LU. This point purifies heat, and reduces the Qi, cools the blood and stops bleeding. It is manipulated by reducing technique. The 20 LI point is also useful (a local point that purifies heat).

In the case of Qi deficiency, the blood is pale, the person is pale and asthenic, and epistaxis tends to occur after exercise. However, the person may be pale because they are afraid, or the physical effort may have increased the heat already present and caused the epistaxis. The colour of the blood is fundamental, and this together with the tongue and the pulse, respectively pale and Wu li (low strength), allow for a differential diagnosis.

In this case, the Qi must be increased and the key point is the 20GV in moxa, together with 4 LI by reinforcing technique (it tones the Qi and works on the face).

In blood stasis epistaxis, often associated with blunt trauma, the blood is dark and contains clots, the pulse is SE and the tongue purple.

In the case of trauma with blood stasis, moxibustion in the traumatised area helps to move the stagnation. 4 LI by Xie technique and moxibustion moves the Qi to move the blood, (acts on the face), GV 23 (xie technique) acts on the nose by opening it.

RF, 45, came to the ER with an epistaxis that had started an hour before. Blood pressure was 150/95 mm Hg. He was red-faced and slightly overweight, his pulse was Hua and his tongue was dark red with a thin yellow patina. Taking the bright red of the blood into consideration, my diagnosis was Fire invading the Lung. I massaged 3 LU bilaterally by Xie technique for about three minutes and the nosebleed stopped.

Asthma attacks: independent of the basic syndrome, asthma crises react positively to puncture or massage of the DINGCHUAN (Xie technique), an extra-meridian point located 0.5 cun laterally to C7. A 70-year-old woman had a summer asthma attack. She complained of difficulty exhaling, and wheezed upon inhaling and exhaling. I hadn't been working as a doctor for very long and so was not very familiar with veins, which in her case were particularly hard to find, so despite many attempts I could not administer cortisone and aminophylline intravenously. Not knowing what to do, I tried Dingchuan massage (I had recently attended an acupuncture course), and the woman's breathing eased

High Fever: : when the temperature exceeds 40 degrees, there are serious risks to a person's health. Where there is a history of febrile seizures, a temperature above 38 degrees is not recommended. Generally speaking, fever, except in the case of malignant hyperthermia, is easy to treat by undressing the patient and giving paracetamol and/or cortisone. Treatment becomes less easy when patients, like MA, 72, are allergic to paracetamol and have contraindications for taking cortisone. When I arrived the fever had risen to 40.5. The only goal was to lower the patient's temperature as quickly as possible. She was undressed with the help of family members, then I bled Erjian (at the apex of the ear), Shixuan (the ends of the fingertips) and all distal Jing points. We were able to lower her temperature to 38.5. Erjian and Shixuan bleeding rapidly purify heat, while the distal Jing restore consciousness and purify heat.

These points are indicated in all cases of high fever, regardless of the underlying syndrome, as in critical situations the main aim is to treat the symptom. The stronger the body's Yang, the greater the immune response. High fever tends to occur in children as, being in a stage of rapid growth, they have a highly developed yang. This is a good sign, except when it exceeds 40 C. Thus it is very important to disperse the heat without fear.

As regards fever, I would like to emphasize that in my clinical practice it has been essential to know the syndromes of the Six Energy Levels and the Four Layers, because they have allowed me to study pathogens, know them in detail and understand if the fever derives from a pathogen at an external level, or deeper and potentially more dangerous levels.

Conclusion

In this article I have reported cases that were treated successfully. Of course there were also failures. The failures involved painful syndromes such as some forms of sciatica and acute toothache. My intention was to try and relieve the patient's pain within 20 minutes with needles alone, but understandably, this could not always occur. In many cases I had to also use western pain medication. I should stress that most patients happily underwent acupuncture, with an attitude of curiosity and trust, despite TCM use not being widespread

locally. I thank them for having given me the opportunity to experiment with TCM in this new field of emergency medicine. As I said before, I have not dealt with a sufficiently large number of cases to make a statistically meaningful evaluation. However, the experiences documented here have led me to believe that the use of acupuncture in the ER can alleviate acute symptoms and quickly improve quality of life for those suffering from specific pathologies, thus saving on the cost of medical tests and treatments, and avoiding or reducing the taking of drugs with their attendant side effects. However, when organ function could be significantly compromised, so putting the patient's life at risk, we must always carefully assess the time frame and methods of treatment, bearing in mind that western medicine provides significant results in the case of medical and surgical emergencies. That being said, integrating a knowledge of TCM could be of great diagnostic and therapeutic help for diseases that have always been the exclusive preserve of western medicine.