# **Cecilia Lucenti**



# **Stories of Neurological Acupuncture**

**COLLECTED BY PAOLO MICCICHE'** 





# *Neuro-Agupuncture Notebooks*

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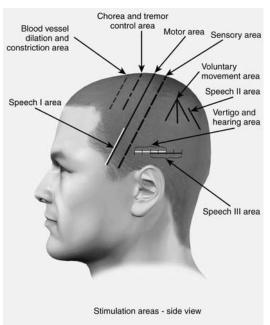
#### FOREWORD: THE NEURO-ACUPUNCTURE REVOLUTION

**Neurological Acupuncture** or **Neuro-Acupuncture** has been defining itself over the last 50 years as an autonomous branch with respect to Traditional Chinese Medicine (TCM).

In the latter, the treatment of neurological pathologies is activated within an overall vision of the individual, while **Neurological Acupuncture** has experimented with specific techniques and areas, more in line with the sectorial *forma mentis* of Western medicine and therefore more easily integrated into its theoretical, diagnostic and therapeutic paths.

The most commonly used techniques of Neuro-Agupuncture are various types of **Craniopuncture** and **Auriculotherapy**, which - depending on the pathology and specificity of individual patients - are performed either individually or combined with each other or also associated with points and protocols derived from classical systemic acupuncture.

Another important element is the physical 'activation' of the patient, with which the effect of the acupuncture stimulus can be more fully amplified and finalised.



From a technical point of view, the insertion of the needles produces a coherent electrical impulse - i.e. a metallic torque effect with current passing through receptors and nerve structures - thus activating phenomena that enable the regulation of the brain.

Through the specific stimulation of certain areas of the head and ear, the electrical activity of cranial nerves is modulated, inducing neuronal plasticity phenomena - as also occurs in transcranial magnetic stimulation - but with more specific and long-lasting effects, because the electrical stimulus produced by the needle also acts

on both the vascular and immune systems of the brain.

This is why the results of rehabilitation with Neuro-Acupuncture are, in fact, superior to those of classical neuromotor rehabilitation.

Acupuncture is in some ways the *medical therapy* in which the principles of neuroscience and physiology, all of which can be influenced through the electrical system: homeostasis, cerebral plasticity, and adaptation to pathology, are most action. The obtained clearly seen in results with **Neuro-Agupuncture** have revolutionised the approach to the neurological patient and opened up a rehabilitation, producing **important** for his new path exclusive - improvements in both degenerative diseases and neuro-rehabilitation.

Improvement occurs in all patients, including chronic ones, although the history of the disease changes completely by starting treatment at an early stage, with results that often have no other therapeutic alternative at present.

The need to intervene in the acute phase, however, inevitably poses the problem of treatment in healthcare settings where the patient is 'institutionalised' and subject to predefined pathways.

# What are the possibilities and what are the constraints to allow Acupuncture to be used more 'in a hospital ward' as integration to current treatments?

A question that inevitably invokes others: who should apply for it? Can it be a specialist care supplement requested only by the patient or his general practitioner or also by the facility or hospital doctor treating him? In this case, in addition to the economic aspect, how should be regulated legal and professional aspects of responsibility for care?

Although the specific training of Italian doctors in acupuncture lasts three years, we are faced with a *grey area* still unregulated, since acupuncture does not have the institutional qualification of *medical specialisation*; thus its use in the NHS is left to the goodwill of everyone and, unfortunately, inevitably ends up depending on chance or wealth, the latter often being decisive in overcoming any obstacle, thus directing the patient to the private sphere.

#### **EMBLEMATIC TESTIMONIES OF PATIENTS**

A stroke patient one day wrote to me: 'Initially I thought acupuncture was a good support but today I realise that many of the official treatments are complementary to acupuncture.

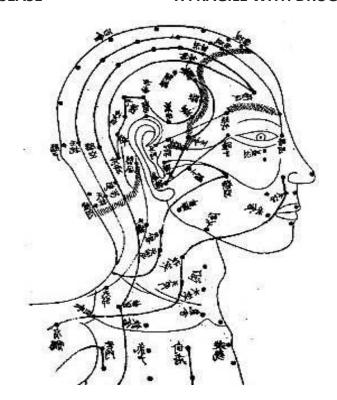
Another patient, in critical condition after a serious car accident, went even further: 'I am very angry! According to them, I had reached the maximum I could aspire to. By chance I came to Acupuncture and my life changed because I was able to regain many of the functions that I thought I had lost forever. From experiences and testimonies such as these, the need to write a History that collects emblematic Stories of these patients; to make them known and to understand the medical and social potential of this treatment with Acupuncture, which is, on the one hand, an ancient therapy proven by millennia of practical applications, but on the other hand, is nowadays the subject of innovative and constantly evolving experimentation, as in the case of Neuro-Acupuncture, structured as an autonomous branch in interaction with modern neuroscience.

The 16 stories that I tell briefly - and for which I use names of invention - are set out in 'mixed' language so that they can be understood both by professionals and uninitiated.

We will see interventions with Acupuncture described with respect to the following neurological disorders and on patients of all ages:

- ACUTE AND SUBACUTE STROKE
- MYELOGENOUS PATIENT
- CEREBRAL HAEMORRHAGE
- COMPLEX HEAD INJURY
- POST-SURGICAL RECOVERY
- PARKINSON'S DISEASE

- MULTIPLE SCLEROSIS
- PROGRESSIVE SUPRANUCLEAR PALSY
- MENINGITIS OUTCOMES
- CHILDHOOD PSYCHOMOTOR RETARDATION
- SPASTIC TETRAPLEGIA
- X FRAGILE WITH DRUG DYSTONIA



# **PATIENTS' STORIES**

My first acquisitions in terms of Neurological Acupuncture refer to 2011 when I was an acupuncture doctor at the Pitigliano Hospital (Grosseto), the first in Italy to practice Integrated Acupuncture in a public hospital ward. With Eva - a fictitious name chosen not by chance for this first patient - we can say that perhaps the first Italian hospital experience of Integrated Neurological Acupuncture took place.

# The Story of Eva - CUTE STROKE

The case of Eva, 83 years old, was indeed very significant. Suffering a stroke - resulting in complete left paresis - she was admitted to the geriatrics ward in Pitigliano Hospital. While waiting for the results of the CT Scan coming from Grosseto's Hospital she was treated with acupuncture in the presence of the local neurologist. Right from the start Eva was able to move both arm and leg again, so much so that over the next 5 days she progressively regained all her abilities.

What makes the story very special is that, during the first acupuncture treatment, the neurologist, observing the immediate results, concluded that it was not a real stroke but a *Tia* (*transient ischemic attack*); when the complete report arrived from Grosseto, he showed a picture of a massive lesion that amazed everyone, including me, who had no idea that I could obtain that kind of result and, what's more, so quickly.

# The Story of Pedro - SPINAL CORD INJURY

Pedro, a South American young man, while using the hydraulic press in the laundry where he works, is crushed, sustaining irreparable injuries to his cervical spine that render him quadriplegic at the age of 32. Admitted to intensive care, he arrived there paralysed and unable to breathe without the aid of a machine. The prognosis seems compromised but the young man has a strong temper and manages to survive.

In the meantime, the relatives, having learned by chance about Neuro-Acupuncture, ask for an acupuncturist; not an easy task because ethical, technical and bureaucratic obstacles have to be overcome, including 'how' to enter an intensive care unit.

On the one hand, there is a registered physician and registered as an acupuncturist, the relatives' willingness to use a complementary treatment and clear support from the scientific literature to intervene in the acute phase; on the other hand, there are restrictive rules for admission to the intensive care unit, also the result of established practice.

Thanks to the 'personal' cooperation of the ward's doctors, I am able to access and proceed with some 'neurological acupuncture' treatments.

A parenthesis must be opened on 'timing'. The addition of acupuncture in the acute phase can help resolve cases that would then have a more difficult recovery. This is mainly due to the effect acupuncture has on the vessels and oedema surrounding the lesion, which we know is responsible for aggravation and greater chronicity. Time, in neurological diseases, is decisive for prognosis and residual disability. Delaying access to Acupuncture means depriving the patient of an important therapeutic resource.

Unfortunately, it is not always possible to obtain the cooperation of hospital doctors who - despite an increasingly comprehensive medical literature and treatment free of side effects - are often prejudicially opposed to therapies they are unfamiliar with, thus further delaying access times. In all the cases treated in the acute phase, the history of the disease has been changed; although even with late intervention, results are obtained that were in any case unhoped for by conventional medicine.

Already after the first treatment with acupuncture, the artificial respirator is disconnected and Pedro can breathe on his own: direct causation, concause or mere chance? It is not known but we do, in fact, record this progress.

In the meantime, Pedro - finally out of intensive care - is transferred to the spinal unit of a specialised hospital. The family and the acupuncturist ask to be allowed to continue the acupuncture therapy. Access is initially denied and a request has to be made through official channels, whereby the treatment is authorised although the doctors in the ward remain sceptical and uncooperative. The hospital treatment for Pedro lasts about two months and is conducted free of charge with the collaboration of two acupuncture doctors already present at the hospital. The patient - in parallel with the traditional treatment - manages to acquire muscle control that allows him to sit up, a greater volume of voice, motor control of the shoulders, elbow and some hand muscles; obviously we are not talking about a cure - impossible given the type of damage - but of an important result, considering the starting point for which the specialists had expressed an absolutely pessimistic prognosis. Today Pedro is in a wheelchair but is able to communicate and partially move his arms; a once unhoped-for achievement. How should this be assessed? Could and should more have been done? Can improvements still be achieved today? We would say yes, on the basis of our continuous acquisitions, as well as those that reach us from the various specialised Centres in the world, towards which Italy suffers an attitude of incomprehensible and unjustified delay.

## The Story of Molly - HAEMORRAGY STROKE

Molly is a 35-year-old business executive when she suffers a cerebral haemorrhage that paralyses the left half of her body. In the first few years after the trauma, her economic possibilities to be treated at various national and international referral centres allows her to recover a good degree of existential autonomy. However, the left half of her body remains impaired by a classic hemiparesis with great spasticity and muscle rigidity that leads to pain and further disability. After 8 years, she turned to acupuncture, initially to treat psychological disorders related to her condition, but became curious and agreed to begin a therapeutic course of treatment for her left paralysis. She is supported by a strong will with the not-so-hidden desire to return to cycling and even skiing. As is she is now in the chronic phase, she not assured of any results before the therapy begins.

The treatment is conducted on a periodic basis (sometimes biweekly) and combines Craniopuncture with classical somatic Acupuncture techniques. After a year of therapy, the patient, seeing a marked improvement, is referred to the Yamamoto Clinic in Japan - specialised in Craniopuncture for neurological diseases - where she stays for an intensive rehabilitation period of 3 weeks.

In the end, the patient regains the ability to use her sick leg to walk more continuously and her left hand is able to be supportive to all domestic activities,

including preparing food, using a mobile phone and carrying objects; she also acquires motor skills that allow her to go back to cycling, where she is able to control the handlebars with her bad hand. She also returns to the ski slopes, assisted of course, as well as trying her hand at a dance-theatre show touring a number of Italian cities and ending with Molly pedalling her red bicycle.

## The Story of Stefi - TRAUMATIC BRAIN INJURY

Stefi is the victim of a serious car accident when she is 24 years old. She spends several months in a coma. She then begins to recover but the damage she has suffered leaves her with a limited vital capacity. Having completed the rehabilitation process in a highly specialised Italian centre and then continuing it on her own territory, she is discharged and referred to occupational therapy, in short: 'we have done all we could and, as far as we are concerned, there is no margin for improvement'.

She comes to the acupuncturist by word of mouth and as a 'last resort'; an unfortunately very common modality. Stefi cannot communicate as her speech is barely comprehensible and also impaired by cognitive impairment; interaction is therefore minimal, in addition to not being able to walk unaccompanied.

Through the combination of all acupuncture neurological techniques, I immediately achieve and the progress soon patient shows important cognitive recovery, thanks to which she can pay attention and interact with the doctor. The family, initially discouraged, now participates in a proactive manner, noting the great improvements that not only benefit Stefi but also have positive effects on their lives, obliged as they are to devote themselves totally to the management of a non-self-sufficient patient.

Neuro-Acupuncture treatment, carried out in cycles of 4 to 8 sessions each on a weekly basis, includes the techniques of neuro-auriculotherapy, craniopuncture and classical somatic acupuncture.

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The patient is treated over a period of five years and, from the third year onwards, she is directed to combine acupuncture with Tai Chi medical gymnastics to work on movement; this is also balance and because there who. if any physiotherapists speech therapists contacted. longer or advise against further intervention, as traditional rehabilitation in the late stages of the disease has little chance of success and both practitioner and patient may find it difficult to continue with а course that is no longer product Instead, with Acupuncture Stefi achieves a complete recovery of the ability to read, to speak - both in the articulation of sounds and in the conception of sentences while maintaining only a certain slowness and a sing-songy tone of voice. On the other hand, her cognitive recovery is complete and allows her full decisionmaking and existential autonomy, thanks to which she resumes travelling alone even by plane - and is able to spend time with others independently and without

need for rest; as well as coping with long distances on foot and being able to speak intelligibly even in noisy places, thus seeing her disability perceived as relative by those who know her for the first time.

An astonishing result that cannot help but make us think what possibilities could be opened up by integrating the different 'medicines' without prejudice or sense of superiority, noting the advances in Neuro-Agupuncture that are taking place all over the world, thanks to continuous research and clinical trials.

# The Story of Maria - HAEMORRAGY STROKE

Maria is a woman from a city close to Naples, married with children, suffering from a massive cerebral haemorrhage. Having financial means, she is able to undertake therapies of classical physiotherapy in specialist centres, even with the use of rehabilitation robots. She came to acupuncture three years after the event, urged by her daughter not tired of seeking alternatives to improve her recovery. The patient, who has complete hemiplegia of the left side of her body, can walk but is unstable and must be supported; she also cannot move her arm and hand, which are affected by hypertonus. She also suffers from temporal seizures with hallucinations, and although she can stay awake for at least half the day, she must then rest and go to bed early.

Given the distance from my clinic, we can only carry out a few somatic acupuncture and craniopuncture treatments. In spite of this, she has an important cognitive recovery that allows her to face the day without rest, without epileptic seizures and managing to articulate, albeit partially, her shoulder and elbow. She can thus move around the house on her own with tranquillity while a certain difficulty in facing open spaces persists, unless accompanied. This is a great improvement for the quality of life of the whole family, as well as allowing Maria to regain much of her autonomy.

A consideration on acupuncture therapy in a case like this, limited to a few sessions. The neurological action of acupuncture - normally on a periodic basis and with longer times - can also be useful with a limited intervention in time, functional however for an initial reactivation of the various mechanisms that determine attention and brain activity.

The human being - 'programmed' by nature to repair himself - receives from Acupuncture with the insertion of needles, an electric shock which, associated with rehabilitation techniques, helps to recreate compromised connections, reactivating them or replacing them with alternative paths. This happens because neuronal facilitation persists for a long time once activated. Maria did not carry out the complete course but she benefited, nonetheless from greater motor capacity and a neurocognitive improvement - difficult to obtain with drugs - with results that are anyway structural and integrable with subsequent interventions, otherwise impossible without a sufficient cognitive boost and a reactivation of the mechanisms primary.

## The Story of Alberto - STROKE

Alberto, suffering from a stroke, is admitted to rehabilitation facilities in Italy and Switzerland where he starts walking again. He comes to acupuncture after a year, urged on by his wife who wants him to improve the severe painful spasms whose contractures also prevent him from sleeping. In addition he has an unsteady gait due to hemiplegia - with a very pronounced mowing step - and a spastic paralysis of the left upper limb with pain on contact. The patient also realises a certain difficulty in mnemonics and in processing information received from outside.

Due to the distance from my medical practice, the treatment is carried out two days in a row every month for 6 months. At the end of the first cycle, the patient is able to walk longer distances without getting tired, he has acquired autonomy in walking, the muscle spasm is gone, and the night pains have ceased as well as the contact pains. He has much more sensitivity in the hand and foot affected by the disease, which are now of normal temperature. On the motor level, he is able to move his shoulder and also his elbow in both flexion and extension, and the first movements of his hand allow him to shake it voluntarily and also hold objects, as well as being able to move them in space. In one video, which patients often proudly send to document their progress, he is seen holding a broom and sweeping the floor, as if to say: 'I am useful again and I can manage independently'.

# The Story of Marco - RECOVERY FROM BRAIN SURGERY

Marco is a business executive and suffers the bleeding consequences of a cavernous aneurysm of the hypothalamic area which, treated with surgery, has left a total paresis of the right side, with severe hypotonia. He also uses a tibial stimulator to aid walking, due to his club foot while his thumb is totally dislocated and immobilised. Cognitively, he seems to have had no complications except for a lowering of his mood.

In the first phase of treatment, Marco is in rehabilitation care in a specialised facility and can combine acupuncture with rehabilitation treatments (proprioception exercises, stretching exercises, occupational therapies and pool therapy).

At the end of each of the first 4 Acupuncture sessions, he is able to increase the number of tasks he can perform. The thumb of the right hand, which was initially hyperextended due to muscular tension, slowly regains its position and one begins to observe voluntary movements in the hand to close the fingers, both overall and selectively; the elbow regains mobility in both flexion and extension and the shoulder is able to make movements in all directions, including rotation; furthermore, during the extension movements of the arm one no longer notices the spasm of the fingers of the hand. The shoulder musculature, which was severely atrophic, regains trophism and function within two weeks.

He can now finally hold objects and move them in space. In terms of walking, on the other hand, he immediately abandons the tibial stimulator and there is an increasing activation of the dorsiflexion of the foot to the extent that, by the third session, he is able to raise his toe.

The reasons for this remarkable recovery are also to be found in the combination of Acupuncture with parallel high-quality physical and rehabilitation therapies. The type of injury - surgical, rather than traumatic or vascular - may also be behind the faster recovery. In any case, the patient recognises the effects of Acupuncture in his improvement; an indication that helps us, as in other cases, to better define the fields of action, with a view to a desirable standardisation of results.

A note about access to this type of treatment. Marco had the financial means to try other ways in addition to the traditional ones, including travel to the acupuncturist and bearing the cost of treatments not covered by the NHS. Moreover, he turned to acupuncture about a year after the event, searching the Internet for other possible therapies to improve his rehabilitation. How many people can access this opportunity? It seems that unfortunately, at the moment, only chance and census are the only really viable paths.

# The Story of Angelo - PARKINSON'S DISEASE

Angelo is 55 years old and has been suffering from juvenile Parkinson's disease for over twenty years; he turned to Acupuncture sent to him by the neurologist treating him to resolve a drug-induced urinary blockage that was forcing him to use a catheter. Acupuncture has, in fact, repeatedly proven effective in unblocking bladder function during neurological disorders of various types, including multiple sclerosis and compression disorders. Angelo, due to increased severity, had to increase his drug therapy but the high dosages are no longer able to control his symptoms.

The first phase of therapy allows a recovery of bladder function and in a short time, complete recovery is achieved. In agreement with the neurologist, treatment is continued to intervene on other very disabling symptoms, such as motor disturbances during sleep, *freezing* and tremor, which do not allow him to carry out normal activities, while at the same time trying to reduce medication to more controlled dosages.

The patient was treated with Craniopuncture and Auriculotherapy for 12 sessions and immediately showed a reduction in all symptoms, particularly *freezing*, with a clear improvement in quality of life and sleep. At the end of the treatment Angelo was able to set up a more effective drug therapy with no adverse effects and a progressive increase in all motor parameters.

How many sessions are enough to unlock a pathology? A question with a necessarily interlocutory answer. One variant, as we have seen, is the timing in the acute phase rather than in the chronic phase. Other variants are the patient's general condition, the severity and type of the disease, possible coexisting pathologies; all factors that can decisively influence the results or, at least, the speed of recovery. Certainly one element to be emphasised is that, once the patient has been 'unblocked' through acupuncture shock, that first intervention triggers a chain sequence that produces effects that may even persist over the years.

## The Story of Mirella - MULTIPLE SCLEROSIS

Mirella is being treated with biological therapies for Multiple Sclerosis; her form of the disease has not led to serious motor impairment but has affected her balance and does not allow her to be autonomous even when moving around the house. After the first 6 sessions, the patient feels a substantial improvement in stability, which allows her greater autonomy in domestic activities. At the same time, an improvement is also observed in mood parameters, since the onset of the disease the most relevant aspect of the subjective feeling of the disease. Also in this, as in other cases, there **have been decisive improvements in the patient's daily life**, enabling him to cross the *borderline* line with the regaining of sufficient autonomy for his needs and great relief for his family members. The latter, who are often true guardian angels, find themselves in the paradoxical condition - not to be underestimated in public health considerations - that, in order to help their relatives, they sacrifice their ability to work and often even their health.

# The Story of Walter - PROGRESSIVE SOPRANUCLEAR PARALYSIS

Walter has a rare neurodegenerative disease, similar to Parkinson's, which currently has no effective treatment and it is fatal in the short term. The symptoms manifested at first encounter are a generalised body instability and a rigidity of the face - forced into a forced smile - with phonation disorders including an inability to control the volume of the voice and a fixity of the emission with a blocking of the spelling of words, often interrupted, before concluding them, with a fixed and prolonged sound. The patient, realising this, often bursts into fits of crying that arise from the cruel contrast between his will and what his body forces him to do.

Already after the second Acupuncture session, greater control of syllabication is noted, with the possibility of being able to conclude words, although still with difficulty. After 5 sittings the daughter reports that the grandchildren have started to call their grandfather on the phone again often, because they are finally able to talk to him, to everyone's great joy; the face is less deformed and more responsive to moods, the patient for the first time in his illness feels an improvement that is reflected decisively in his mood. After a while, as expected, the patient dies but having enjoyed a better quality of life remaining.

## The Story of Giovanna - MENINGITIS NEUROLOGICAL SEQUELAE

Giovanna is a young dentist suffering from meningitis; she turns to acupuncture because of the results of the illness, which are quite disabling: severe headaches that come on at the slightest mental effort, lack of concentration and memory, hypersensitivity to magnetic waves, visual disturbances and diplopia, moments of absence, time hallucinations. This situation exposes her to various injuries and makes her work very problematic, so much so that she has to change her job completely.

The initial results are a reduction in headaches and the moments of 'absence' - finally perceived as such even by the patient herself - slowly disappear. Over the next two years, Giovanna resumes her profession and the continuous training it entails at full speed. The diplopia regresses completely thanks to specific auriculotherapy treatments. The only current outcome is a headache that occurs approximately monthly but with finally typical features.

#### The Story of Simone - QUADRIPLEGIA CEREBRAL PALSY

Simone is 47 years old and suffers from infantile spastic tetraparesis, which forces him to walk with two canes, using both arms to support himself on his feet and therefore without any residual autonomy. Like all patients of his age, he was getting worse and the outcome of various orthopaedic treatments, such as Botox - to control the spasms - seemed to be increasingly disabling his muscular capacity. He turned to acupuncture to reduce the pain and spasms, also because, in such a case, no one would expect any improvement; instead, Simone slowly managed to implement all the motor parameters in an impressive manner.

After several months of fortnightly treatments, he is now able to stand without any other support and to walk with only a crutch; his muscle tone has normalised and he no longer has the spasms that used to be continuous. The treatment definitely improves his hypertone, while his feet, deformed by the pathology, gradually resume a physiological position. Simone acquires greater autonomy both in personal hygiene and in household management, and can stay on his own for long periods of time, finally managing to perform the gestures necessary for his self-sufficiency.

# The Story of Nando - ICS FRAGILE WITH DRUGINDUCE DISTONY

Nando is 28 years old and was born with *Fragile X* syndrome, a structural genetic deficit. As an adult, he begins to suffer from drug dystonia: a chemical short circuit that causes him to be unable to stand upright and walk as before. Since it was impossible to stop the drug therapy, his parents, after five years, turned to acupuncture, which is mainly operated with craniopuncture about once a week and aims to stimulate the brain in all its functions. Within a few months, his condition began to improve to the point where he was able to stand upright for long periods, walk with a certain degree of autonomy and no longer use the wheelchair he had had to use. His behaviour also improved and his violent and oppositional moments were substantially reduced.

## The Story of Anna - TRAUMATIC BRAIN INJURY

Anna is 42 years old. As in Stefi's previous case, she was the victim of a serious car accident twenty years earlier. She spends a few months in a coma and then begins to recover but with damage that reduces her vital capacity, as well as a strong tremor in her right limb, which is so extensive that it affects her whole body continuously; she is therefore put on the list for the placement of a thalamic stimulator to try to stop or reduce this disabling tremor. In addition, Anna 'sees double' and her eye is completely turned outwards. She began the treatment by intervening as a patient during the Acupuncture in Neurology Advanced Course I was giving at the University of Siena. Already in front of medical colleagues there are immediate responses and Anna then asks to be seen regularly on an outpatient basis. Over the course of the first few months the tremor reduced, at times almost disappearing, so much so that even the need to proceed with the planned surgery was questioned. The diseased eye begins to move again and is brought back into alignment, thus eliminating even corrective glasses. Therapy, as in other cases, is carried out using the whole *palette* available: the various techniques Neuro-Auriculotherapy Craniopuncture, and classic Acupuncture neurological orientation.

#### PAEDIATRIC NEURO-AGUPUNCTURE

Acupuncture for childhood rehabilitation has, since the 1970s, been one of the earliest developed applications of Neuro-Acupuncture. Among others, it should be mentioned *Jin Rui*'s 2011 protocol on infantile cerebral palsy and cognitive retardation. The child has a great neuroplastic capacity that, given his age, is easily developed with acupuncture, managing to improve many parameters, with sometimes surprising recoveries.

The most commonly used techniques are Craniopuncture, while Auriculotherapy is particularly indicated for pain, including childhood oncology. There are several dedicated hospitals around the world, first and foremost the paediatric hospital in Hanoi (Vietnam), which reports major successes in the treatment of autism. Below are two of the various cases I have dealt with, that are revealing the efficacy of this therapeutic approach, which, given the results, is particularly exciting since it involves children!



## The story of Gemma - PSYCHOMOTORAL DELAY

Gemma is 6 years old. After a series of perinatal problems and an overall psychomotor retardation, the time came for her to enrol in school but with obvious difficulties: she does not speak, does not focus attention and has problems with both balance and manipulation of objects. Referred to Acupuncture by a doctor friend of the family, she immediately shows significant improvements. Although the treatment started late for phonation, and although it is not possible to treat her continuously (due to family logistics and the Covid pandemic), important results are achieved: her balance and attention improve exponentially, she begins to speak and count, is able to conjugate verbs, recognises syllables, holds a pen and makes drawings that represent reality; behaviour that is now compatible with both school attention and play, so much so that Gemma is even able to sing the little songs of her age.

# The story of Dolores - HYPOTONIA AND TETRAPARESIS FROM BIRTH

Dolores suffered a particularly troubled birth management, with an oxygen deficit that impaired her neuro-motor development. At two years of age she is hypotonic; she can sit up but is unable to move or rotate her trunk. Her hypotonic head causes a crushing of the throat with laryngomalacia. As a result, she is unable to cough or cry, so much so that she is forced into very frequent hospitalisations due to the resulting respiratory complications. I start craniopuncture treatment on her twice a week and over the next few months we manage to keep her upright on her feet, then she starts crawling, moving her trunk, crying, even screaming and finally pronouncing her first words. After six months of treatment, despite two bronchitis, she no longer had to be hospitalised; she walks independently with a little help to keep her balance or by supporting herself against the wall with her hands. Although she still suffers from a mild cyposis (curved back), her progress is steady day by day. The family is very happy about an unexpected recovery and rejoices to see her finally, like all children, crying and throwing tantrums!

#### **CONSENSUS ON STORIES**

Those presented - albeit briefly - are **some emblematic cases** reflecting different types of disease and related treatments in which **Neuro-Agupuncture** has been used: **traumatic, post-surgical, vascular, functional, genetic, degenerative pathologies.** 

In the latter, Acupuncture can also be a relief to the quality of life in serious diseases with a progressive course, such as *Parkinson's* or *Multiple Sclerosis* in which the results observed so far speak of periods of alleviation or partial remission of some symptoms.

The impact of Neuro-Agupuncture, however, concerns the entire universe of neurological pathologies, e.g. restless leg syndrome, tinnitus, neuropathies, migraines, facial pain, postherpetic neuralgia, and compartmental syndromes.

In the meantime, new testimonies of applications and important results are arriving from all over the world, which therefore deserve constant further study and for which the medical literature offers more explanations every day about the effectiveness of the techniques used and the biological results triggered by acupuncture.





# PHYSIOTHERAPY AND SPEECH THERAPY: COMPLEMENTARY ACTIONS TO NEURO-ACUPUNCTURE

Acupuncture, by activating various mechanisms of vigilance and brain plasticity - including the formation of new stable neuronal synapses - is to be included in a contextual pathway of cognitive and motor re-learning of the individual, which allows the consolidation and memorisation of the new skills acquired thanks to the acupuncture stimulus.

By finalising these stimuli to facilitate and 'expand' them with greater physical activation, the effectiveness of the treatment can be greatly expanded. This is what is known as LTP (*long-term potentiation*) whereby after one achievement, another and another is added and where the result of Acupuncture is energised and reaffirmed by the actions of complementary techniques, which promote the association between the needle stimulus and its fixation in physical memory.

This pathway includes the support of all the **functional and cognitive neurorehabilitation** techniques, first and foremost **physiotherapy**, to which we can add **speech therapy**, but also body and emotional awareness pathways such as **theatre-therapy**, which, by targeting the emotional intention of the scenic character to a bodily expression and gestures, contributes to the psychomotor and not only 'occupational' re-education of the patient, through a motivational vector.

#### **OUTLINE OF THE HISTORY OF NEURO-ACUPUNCTURE**

In the last quarter of the 20th century, the most effective techniques for treating neurological disorders were developed outside Chinese Acupuncture System. A distinction must therefore be made between two different *rationales*:

- **Acupuncture in Neurology** using Chinese energetic acupuncture, i.e. organic and systemic both modern TCM and Classical Acupuncture to treat various neurological pathologies
- Neurological Acupuncture or Neuro-Acupuncture, on the other hand, is an autonomous branch that uses certain acupuncture methods but in favour of a specific therapeutic technique, applied exclusively to the neurological sphere as well as nourished by the acquisitions of modern neuroscience; this therapy can therefore also be used by doctors not necessarily trained in Chinese Acupuncture.

Thus, although ancient Chinese doctors knew the importance of the head in meridian theory, they used it - even in the case of *craniopuncture* - mainly for mental, facial, head and sensory organ disorders. Following Mao Tse-Tung's push for the fusion of the two medicines - the Chinese and Western ones - research and experimentation in Acupuncture have been greatly accelerated.

**Fang Yunpeng** in the late 1950s and **Tang Songyan** in the early 1960s began using craniopuncture to treat many other diseases, gradually perfecting this technique.

In 1971, after this long period of clinical practice and after repeated testing, the craniopuncture therapy of the Chinese neurosurgeon *Jiao Shun Fa* appeared, followed shortly afterwards by that of the aforementioned *Fang Yunpeng*.



Dr. Shi Xue-Min (Cina)



Dr. Zhu (California)



Dr Jason Hao (New Mexico)



Dr. Jiao Shun-Fa (Cina)



Dr. Toshikatsu Yamamoto (Giappone)



Dr. David Alimi (Francia)

So to sum up, from the mid-20th century onwards, two of the most effective techniques on neurological pathologies were developed outside Chinese acupuncture and, to a certain extent, also outside China:

- SCALP ACUPUNCTURE developed both in China and in the rest of the world, the most important being that of the Japanese physician *Toshikatsu Yamamoto* with his Scalp-Acupuncture, while the Chinese **Ming Qing** *Zhu* and *Jason Hao* conveyed and implemented it in the United States where they opened dedicated schools and clinics.
- **NEURO-AURICULOTHERAPY**, which has been developed independently since the 1960s in France by various neurophysiologists, today sees its main exponent in the French physician *David Alimi*. It is an example of how it has been possible to transform an empirical practice into a real science, thanks to many scholars who have systematised all the aspects that find their basis in the Embryology and Anatomy of the Central Nervous System.

Then there is the whole **neurological finalisation of Chinese Acupuncture**, from which techniques of both Craniopuncture and Auriculotherapy but also more general stimulation have been extrapolated. A leader in this sense, since 1972, is the Tianjin hospital where **Shi Xue Min** has developed a style of acupuncture - the *Xing Nao Kai Qiao* ('awaken the mind and open the orifices') - that combines a series of acupuncture points with specific techniques developed to treat neurological patients, mainly in post-stroke outcomes.



Dr. Nguyen Van Nghi a Ravenna



Ospedale di Pitigliano Centro di Riabilitazione di Manciano

**Italy** has entered this new frontier, mainly using the neurological finalisation of Chinese energy acupuncture.

It is necessary to mention first the Vietnamese doctor *Nguyen Van Nghi*, who moved to France as a young man and who already in the late 1970s operated public spasticity clinics - the only ones of their kind - in Ravenna and Syracuse, with excellent results on both adults and children.

Still in the public sector, one example among the few that have been activated in recent years is the attempt at a sectoral use of Acupuncture for neurological and orthopaedic rehabilitation, by the *Manciano Rehabilitation Centre* within the activity of the Pitigliano Integrated Medicine Hospital in Grosseto's district.

A real application, this time of Neuro-Acupuncture, in the hospital setting is the one underway at the Volterra Hospital, the result of an agreement signed in 2023 between AMI Integrated Medical Acupuncture, Fondazione Volterra Ricerche and Auxilium Vitae Riabilitazione for experimentation and research in the field of Neuro-Acupuncture. Thus, weekly sessions are held on the ward, together with doctors and health workers, aimed at the joint rehabilitation of patients with severe neurological diseases or injuries, using the various Neuro-Acupuncture techniques. On the training front, in recent years we should mention the Neuro-Auriculotherapy Courses in Turin by David Alimì, those of Craniopuncture at the Merano Hospital by the Japanese Toshikatsu Yamamoto, and recently, for the first time in Italy, Neuro-Meridian Acupuncture by the Chinese-Canadian Poney Chiang, with the neuroanatomical research of ancient Chinese points in their coincidence with specific and characterised points of 'western' anatomy.

Specifically dedicated to the various Acupuncture techniques used in Neurology was the **University of Siena's Advanced Course** held for three academic years from 2018 to 2022 (*Principles and Techniques of Acupuncture in Neurology*) under the scientific direction of Cecilia Lucenti.



Also working in Italy is **Chunbiao Guo**, secretary of the Forum of Chinese Doctors, who was a pupil of **Jiao Shun Fa**, one of the first founders of craniopuncture, whose goal - as a neurosurgeon - was to diagnose and treat neurological diseases, including Parkinson's, multiple sclerosis and stroke sequelae.

Guo recounts that Shun Fa "realised that the diagnoses of western medicine were precise but the treatments difficult and burdensome for the patients, while improvements with traditional acupuncture were too slow". Hence the intuition to combine Chinese and Western medicine from the realisation that 'since everything starts in the brain, a therapy closer to the skull had to be created'.

This treatment is therefore carried out by localising and stimulating precise areas of the cerebral cortex with needles. There are 16 different areas of the cortex to be stimulated and each of these corresponds to a different brain activity.

#### **NEURO-ACUPUNCTURE AND HEALTH POLICY IN ITALY**

At this point, it is no longer possible to avoid a health policy discussion on this new potential for treatment and rehabilitation of neurological diseases.

If, in general, Acupuncture can be a resource in both the acute and rehabilitation phases, why not introduce it into integrated medicine protocols?

Acupuncture - being a therapy that can only be practised in Italy by doctors - is therefore legally applicable in all official treatment settings. However, this is only in theory, since except for the *Pitigliano Hospital* - a specific but experimental Integrated Medicine hospital - all other public facilities practice it, where present, only on an outpatient basis and often limited to Pain Therapy. There are few exceptions, mostly in Tuscany, while in some regions the resolutions to this effect of the State-Regions Conference are not even applied.

In fact, the excellent clinical effects on patients - sometimes the only effective therapy - the total absence of side effects and the negligible operating cost (needles alone), elect it as a medical treatment that can be successfully applied on a large scale. This is why the sustainability of the National Health System (NHS), should prioritise interventions, such as this one, of proven effectiveness and limited cost.

In order to be able to make the best use of Acupuncture in the public sphere, however, training leading to recognition as a medical specialisation is necessary; an Acupuncture associated therefore with a dedicated and recognised medical practice, which does not relegate it to a 'second job', which will inevitably not be as in-depth and effective as it should be and as the subject matter would allow.

In the case of Neuro-Acupuncture - as we have seen in our Stories, albeit narrative and partial - it focuses on the most serious pathologies and, above all, on the possibility of identifying a specific method, such as to make it compatible with our

western system and therefore 'standardised' and not relegated only to private clinics or to the individual, non-replicable wisdom of single acupuncturists. Rehabilitation in the neurological sphere produces results that go well beyond what is expected from traditional rehabilitation paths; furthermore, very expensive rehabilitation techniques are currently in use in the public service, without producing any appreciable benefit, instead generating many problems of

On the other hand, the benefits of Acupuncture are many on motor symptoms, as well as on other aspects of the disease: emotional, behavioural, attention disorders or epileptic sequelae; all of which are otherwise difficult and costly to

access and denying the real possibility of providing an answer to the huge number

manage pharmacologically.

of patients.

The creation of integrated medicine outpatient clinics with tasks of primary care, chronicity management (especially for an increasingly elderly population) and Neurological Acupuncture would lead to significant savings for the NHS, as

is unequivocally demonstrated by the experience of the Pitigliano Hospital - where just one month of acupuncture application has shown changes on all neurological assessment scales - and of the other, unfortunately few, Italian realities that work in this direction.

The only obstacle to its extensive application on a large scale is therefore - I repeat - the need for doctors who have advanced training in acupuncture and the relevant professional identity and autonomy; so that they can make the most of its potential as a 'medical system', not limiting themselves to the level of basic protocols typical of antalgic therapy alone, as is the case in most cases.

#### **CONCLUSIONS**

Our brief excursus certainly does not claim to be a case report or scientifically exhaustive. My experience as a physician, after the theoretical and practical acquisition of the individual techniques - thanks also to the frequentation of great international masters - proceeded by elaborating a mixed treatment whose results, I believe very significant, I wanted to present in these brief reports; a number of cases that, although limited by the necessary brevity of a pamphlet, allows a concrete testimony of the decisive importance that 'non-Euclidean' medicines can represent for patients.

These results are also in line with the many achievements in the many active international realities from which we can take inspiration, so that they can also be implemented in Italy.

It should be added that in today's society, on the one hand, certain misfortunes are no longer accepted with the resignation they once were, and on the other hand, the diminishing receptive capacity of hospitals increasingly burdens families and private resources, which are often inadequate to bear the burden.

If we think of the incidence of neurological diseases, which are on the rise everywhere due to more effective rehabilitation treatments and longer life expectancy, we are faced with the need to provide a health response that is effective, applicable on a large scale, simple to manage, low cost and free of side effects, as in the case of Acupuncture.

This is therefore the right *timing* to highlight how there are approaches that, by combining the knowledge of different medical systems, can become a valuable resource for achieving greater and sometimes unexpected outcomes.

What we have summarised in these pages is an invitation to set up interdisciplinary tables to identify - legislatively and operationally - the possibility of providing the territory with outpatient integrated medicine facilities - especially neurological ones - as well as to regulate the regulations for access of acupuncture physicians to complementary hospital care for patients who request it or where the treating physician or specialist deems it appropriate.



#### **NEURO-ACUPUNCTURE: ESSENTIAL BIBLIOGRAPHY AND SITOGRAPHY**

#### **INTERNET SITES**

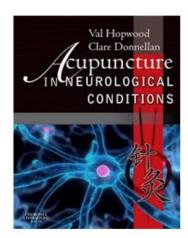
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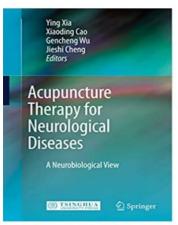
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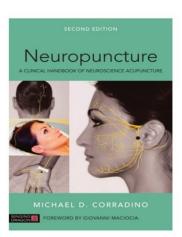
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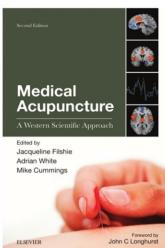
#### **VIDEO**

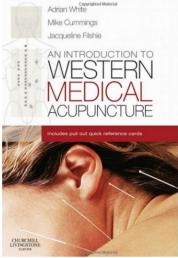
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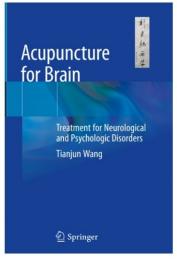




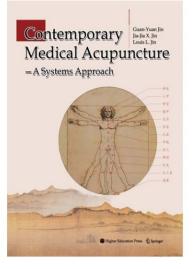
















Cecilia Lucenti graduates in Medicine e Surgery at the University of Siena. During her university years, she graduated from the "School of Acupuncture" in Florence.

She later obtained a Master's degree in Acupuncture at the University of Florence and in Auriculotherapy in France at the Université Paris 13.

Over the years, she has learned many acupuncture techniques with neurophysiological implications as а direct pupil of numerous international Toshikatsu Yamamoto, masters, including Zhu Ming Qing, Jason Hao, Poney Chiana, Richard Tan and David Alimì.

field, In the sports he became an acupuncture doctor for Mens Sana the italian first division of basketball; Robur Siena Calcio: and for Elena Vallortigara, Italian high jump champion.

He is President of the Association *AMI, Integrated Medical Acupuncture,* which promotes knowledge of acupuncture among doctors for a greater integration in the current clinic.

In this sense, he worked as an acupuncturist at the Pitigliano Hospital, the first public hospital in Italy of Integrated Medicine where acupuncture is used on in-patients. In Pitigliano, he began working on neurological rehabilitation, using both classical acupuncture and Neuro-acupuncture, the new branch born by modern research.

As a result of this experience, from 2019 to 2022 she became the scientific director of a unique Master Course in Europe, "Principles and Techniques of Acupuncture in Neurology" at the University of Siena, where she is also a lecturer.

She regularly holds courses in Neuroacupuncture in Switzerland, including one at the Cantonal Hospital of Mendrisio, Switzerland.

He is currently conducting a Neuro-Agupuncture trial in a hospital ward on behalf of *Volterra Research Foundation* and *Auxilium Vitae Rehabilitation*.



Cecilia Lucenti with Toshikatsu Yamamoto



Via di Pantaneto 71 - 53100 Siena

www.agopunturaintegrata.it info@agopunturaintegrata.it