

Mesotherapy (biopuncture) and Pain Management



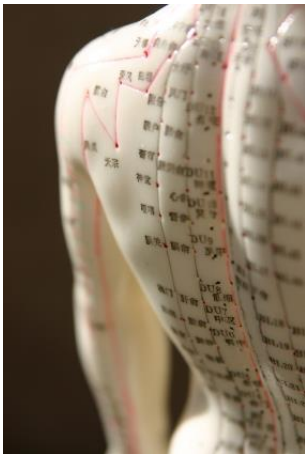
A case presentation

The following is a case presentation of an 82 year old female teacher actually, teacher of Montessori schools and she presented to me in November of 2008 as a referral from a holistic medical doctor, who sent her to me specifically for management of a fracture at the L2 level.

He specifically requested that we perform Mesotherapy with this patient to aid her in her recovery, and when she came to me she was in a lot of pain and was just experimenting with the use of a tens device in which she was achieving a lot of pain reduction. At the time of the intake I made sure that she was on enough of her calcium, magnesium supplementation and ensured that she was taking strontium.

My findings with her from, x-ray findings, confirmed fracture at L2, all of this was as a result of a fall from a step ladder and I noted that she had restricted ranges of motion especially on the right hand side. Her quality of life was suffering as a result of not being able to get about and move around very easily. The remedies that I chose for interdermal application were the remedies by the Italian company Guna. These remedies included Guna Neural, Guna Muscle, and Guna Lumbar, more on these in a moment. I utilized a therapeutic technique called Mesotherapy or Interdermal therapy and this is a delivery system which involves the introduction of substances either nutritive or pharmaceutical in micro doses into the dermis. This is in an attempt to stimulate the meso dermal derived tissue and structures. In this situation the mesodermal tissues would be the collagen related tissues such as muscle, bone, the connective tissue and vascular structures.

Mesotherapy is a term that was coined in 1952, in France by a Doctor Michael Pistor, who at the time was using procaine and borrowed some techniques of the German neuraltherapy in order to elicit pain reduction in his patients. At the time, due to political tensions between France and Germany he renamed this therapy and called it mesotherapy and expanded upon it. In essence mesotherapy is microdose introduction of substances into the dermis in serial puncture type techniques. These puncture techniques can be papule techniques or can be what is known as a nappage technique a very superficial introduction of the needle into the dermis or a point to point technique all of these are in an effort to deliver the medication locally, and in a drop by drop manner. The theory behind this is that it is actually introducing the medicine in a time released fashion, so that the action of the medicine is more evenly and slowly distributed into the circulatory and lymphatic networks and so in fact can be distributed through to the underlying tissue. The difference between an interdermal technique such as mesotherapy and intravenous or intermuscular techniques is that the medication in an intravenous or an intermuscular technique is in fact delivered in a fast acting kind of fashion but the results of this are actually fleeting, whereas the result from a mesotherapeutic technique can be more long lasting.



The points that are chosen for the actual delivery of the medication are based on classic acupuncture points or Ashi points. Points may also be based on segmental points localizing the treatment specifically related to a segment of the body. Symptomatic points are where patients experience pain. The how's have to do with the above mentioned concepts related to keeping medication in an area to work at a more time released manner to endure energetic stimulation as well as systemic stimulation to the body. The frequency of therapy is in fact once or twice a week for three to four sessions; by the end of three to four sessions we should know whether or not we are going to have a therapeutic effectiveness. In fact, the best results are usually reported between the second and third sessions. What may also happen in fact is the healing crisis in which the treatment area may become inflamed as an attempt for the body to find order. As a result, patients may experience an exasperation of their systems.

I would like to explain the composition of the Guna remedies; Guna is an Italian company that has taken Homotoxicology and advanced it in light of new scientific findings regarding the communicating molecules of the immune system such as the cytokines, and the endocrine systems such as the hormonal influences brought them forward in a homeopathic dilutions which mimic physiological dilutions within the body. This is provided for a very innovative approach that encompasses addressing the patient in totality that which is biochemical and affecting the psychoneuro-endocrine agents and structures within the body. Interestingly, when we look at the Guna Lumbar

remedy it is comprised of four different areas that are addressed by the multitude of remedies within the Guna Lumbar. The first is an analgesic core and it is based on homeopathic remedies for reduction of lumbar sacral pain and symptomatology and different types of origins including neuromuscular origins and really helps to localize areas like the lumbar sacral joints. The remedies here include like Bryonia, Sepia and Natrum phosphoricum to name a few. In the psychoneuroendocrinological category beta-endorphins at 4ch is included in the remedy to help manage the pain symptomatology by up regulation of the beta-endorphin receptors which ultimately lead to pain reduction. Anti-inflammatory support here is quite innovative, there is the inclusion of the Anitlukin 1 alpha and Antilukin 1 beta at 4c potencies and this helps to modulate the L1 alpha and L1 one beta pro-inflammatory activity in the triggering off the inflammatory response, so this helps to inhibit the inflammatory cascade which ultimately causes the production of the Aracodonic acid pro inflammatory cytokines as well. Anti-degenerative remedies are included, including intervertebral disc, sarcode at 4x and this actually allows for both an anti-degenerative and an anti-neuralgic action. The other remedies Guna-Neural and Guna-Muscle are similarly put together and organized to include all of these different categories of remedies. Interestingly, in the Guna-Neural just a note here remedies included that have to do with influencing the vascular origin or vascular etiology relating to pain. The inclusion of the remedy Formicroya at an 8x potency is included here which helps in the reduction of the paraesthesia and helping to produce vaso-dilation and hyperemia of the nervous tissue.

We began mesotherapy treatments in November, and on the first treatment she was in a remarkable amount of pain even though she was using the tens machine to help quiet the pain she was still having a great deal of difficulty in terms of completing any kind of activities of daily life and having difficulty sleeping. Care that was prescribed to this patient included that she was on adequate amounts of Calcium, Vitamin D, Strontium, and Vitamin K, and also a remedy from Guna called Guna Osteobios and the Guna Osteobios remedy actually includes the Calcerca Salts, such as Calc Carb, Calcphos. Calcphos to help stimulate the mechanisms involved in fixing calcium salts to bone. It has a core of trophic action on the bones by actually includes modulate action of the osteoclastic and stimulate the osteoblastic activity it includes calcitonun and parathyroid gland in homeopathic dilution or in physical dose to help fixate the calcium to the bone. This in consequence helps to regulate the bone production and bone re-absorption and also helps to simulate bone production. So this is a useful remedy not just for influencing bone metabolism which was the case with this patient but also it can be used in cased of Osteoporosis. The dose that was recommended was 10 drops 3 times a day and this was over an extended period of time a least 3 months worth.

The points that I chose for Mesotherapy were local points around the L2 area and we used a technique which is known as the Axial technique which involves essentially tracing the urinary bladder meridian and also extraordinary vessel points in the local area. I concomitantly used some of the more classic acupuncture points to help with the governing of the ligaments,



muscle, tendons and bones I used Gallbladder 34 as well as a urinary bladder 60 for pain and discomfort in the low back region. At these points the technique that was utilized was Mesotherapeutic specifically, point to point techniques with the injection depth being 3 to 4 millimeters at the dermis level. The gauge of needle used was a 27 gauge needle and the amount of solution after using one ml of these ampules, Guna-Neural, Guna-Muscle and Guna-Lumbar was 3cc's in total; this was pulled up into a 3 ml syringe. After the point to point technique I then concluded with the nappage technique which is a series of multi pricking at the surface of the skin not permeating any deeper than about 0.1 to 0.2 millimeters at the site. The amount of solution delivered here was also in micro doses at each point to point technique the amount of solution was approximately 0.2 millimeters and very little solution delivered in the nappage technique. The first treatment was well tolerated and the patient received the standard home care guidelines which include not having a lot of exposure to extremes of temperature especially to heat, not swimming in a pool, not using whirlpool, or saunas and the reasoning behind this is that we want to keep the area infused by the medication and by increasing the circulation we are actually causing diffusion of the remedies to quickly. Now as a pretreatment I did use an infrared dome to gently heat the dermis in order to raise the blood vasculature and the lymphatics to the area.

A total of three treatments were conducted. After the first the patient came back and noted almost a 30% reduction in pain. She was able to get around and be mobile more easily. Our second treatment was delivered a week later at which time between the second and third treatment she had the most dramatic improvement, improving almost 80% in terms of functionality and pain reduction. This is not an uncommon finding or occurrence we generally observe in the practice. As a general rule, if after three mesotherapy treatments, maybe four treatments there is not a marked change in the condition that if either a change in cocktail is needed or a change in the modality overall; this is based on the clinical outcome or clinical judgment of what is happening. By the end of the third treatment, which was by now three weeks post our first initial treatment she was back to 100% which was without pain and completely functional and did not have any pain on the right side, maybe a little bit of sensitivity that was noted in terms of compensating or guarding the area. However, she noted that the area was much better with activity and she was able to resume full daily activities of life. At this

point she's been referred back to her referring medical doctor and I discharged her from care with the recommendation that if the pain returned, to also return for maintenance treatments. Again, in general mesotherapy can be quite a helpful and cost effective therapeutic tool to bring patients to better function to improve their quality of life and to manage pain from a perspective which is not just about the symptomatic management of pain but the actual resolution of the inflammatory response and the ensuing degenerative processes.

- Michael Rahman, BSc, ND, January 2009