## BEE VENOM THERAPY IN NEUROLOGY – CASE REPORTS

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## **Abstract:**

It is already well known that bee venom may be useful in treating neurological conditions like Multiple Sclerosis. According to previous clinical experience, bee venom therapy is able to treat also other severe conditions like cervical myelitis or different types of demyelinating lesions.

The paper presents 2 cases of myelitis and 2 cases of multiple sclerosis, where bee venom therapy provided great effectiveness by clinical point of view. In 2 of these cases, the effects were also confirmed by magnetic resonance imaging.

In the last 9 years I treated with apitherapy more neurological patients and there is hope that we can improve their condition using natural remedies.

I had in observation more patients with multiple sclerosis (MS – frequently diagnosed in Romania) and less with other neurological problems: ALS, different types of myelitis, intramedullary spinal cord tumor or myasthenia gravis. I obtained certain improvements for some cases of MS and myelitis and I will present them for you.

**Case no. 1 Mr. A. G.** age 24, 1,70 m/72 kg, officer of the gendarmerie. Diagnosis: Demyelinating illness – obs. Multiple sclerosis or Neuroborreliosis.

Symptoms appeared 2 years before first consultation: he was in a training camp in the mountains and he did a lot of physical effort. They appeared walking disorders, blurred vision, speech disorders, right hand coordination disorders and headache with heating sensation. He did two MRI exams which showed cerebral demyelination lesions. All his symptoms dissapeared after two weeks, without any treatment. Then he restarted training exercises in the camp. Two months before first consultation, he went again in a camp and after physical effort they appeared coordination troubles on the left foot. Later, after 3 days, appeared also sensitive troubles (lack of sensitivity in both legs) and sensation of stiff legs. Symptoms dissapeared in few days, after relaxation. The only symptom that persisted was Lhermitte's sign (electrical sensation that runs down the back and into the limbs, elicited by bending the head forward). He did also lumbar puncture and evoked potentials and he was diagnosed with multiple sclerosis. He received treatment from the neurologist with cortisone (Medrol), vitamins and calcium. Neurologist also suggested him the treatment with interferon.

At first consultation, in November 2010, he had: pain in thighs and legs, numbness in left hand, foot and left side of his thorax, which becomes more intense after physical effort. MRI in October 2010 showed 30-40 demyelinating inactive lesions, slightly progressive than previous MRI. Arterial and venous circulation were normal. Borrelia tests (antibodies) were negative.

Lumbar puncture results: CSF 11 elements/mm<sup>3</sup>, oligoclonal bands of IgG negative, Pandy reaction in CSF weak positive, IgG in CSF 43,6 mg% (increased; normal level 10-30)

I prescribed him royal jelly 1 g/day then 2 g/day, pollen 2 teaspoons/day, propolis tincture 80 drops/day and a mixture of herbs (lavender, linden, hawthorn, basil, mullein, cowslip, creeping thyme) 1 liter/day. He started also bee venom, first as an ointment (Apireven) and after one month, injections with bee venom solution. His main treatment was 10 months with BV injectable solution. First 2 months I used VeneX 10 solution from Apitronic Services (1 mg/ml) gradually increasing dose, then bee venom solution from Epsicom Company, 2 mg/ml, applied in acupuncture points from arms, legs and back.

After first 2 months I asked him to repeat tests for Borrelia because his symptoms were mainly pain and numbness and he walked a lot in the nature. Results: RIF + WB Borrelia afzelii IgG positive, WB Borrelia burgdorferi IgG negative. His reaction was very good at BV treatment (BV is efficient in MS and also in Lyme disease). After the test results, he started to take antibiotics for two months. During the antibiotic treatment, pain in legs reappeared as at the beginning. He continued also with more concentrated solution of bee venom (2 mg/ml), increased gradually to 20 bee stings equivalent daily (1 ml solution, daily). He took also propolis tincture 3 ml/day, garlic capsules and essential oils for antibiotic effect.

MRI after 7 months treatment showed inactive lesions, same aspect as previous MRI. It was a significant clinically improvement (no symptom). He continued and doubled the dose (40 bee stings equivalent, daily= 2x1 ml/day, with Epsicom solution) for the next 6 months. In these 6 months, the last 3 months (Dec 2011 until Feb 2012) he trained physical exercises with high effort and he was totally capable for this effort. After these 6 months, he stopped bee venom treatment because he had not anymore symptoms. Conclusion: for this patient, bee venom was the most efficient remedy, by clinical point of view (after one year of treatment, no more symptoms). MRI after treatment had the same aspect (inactive lesions).

**Case no. 2 Mrs. T. D.,** age 39, 1,65 m/58 kg. Diagnosis: multiple sclerosis. Symptoms: feet and left hand are cold.

First symptoms appeared 3 years before first consultation. In the spring of 2008, she was very stressed because her little boy had a severe infection and she was afraid that he will die. Fortunately he became healthy soon. Later she had headache, pain in the throat and a big swollen area on the left side of the neck. She had flu for 3 weeks. She went for an MRI (May 2009) which showed a big tumor (5/3,5 cm), vagal schwanoma left side of her neck. The schwanoma was removed by surgery in June 2009. She made a new MRI (Dec 2009) which showed only one inactive demyelination area at C4 level and small inactive cerebral lesions.

After 2 years (September 2011) they appeared: walking disorders, unbalance, dizziness, she couldn't move her left arm and leg. Two weeks before, she had a quarrel with her husband, she was angry, then she awake suddenly incapable to move her left arm and leg. MRI in October 2011 showed a demyelination active lesion on the right side of the forehead (15 mm diameter). She received cortisone (Solumedrol) for 5 days (during the treatment, she had blurred vision). The active lesion appeared between the MRI from March 2011 (it was not visible) and MRI from October 2011: an unique active lesion. Blood tests: all normal except granulocytes high percent (79,2%, normal range 50-75). Evoked potentials were normal.

At first consultation (November 2011) she received pollen (dose from 3 teaspoons to 4 big spoons daily), propolis tincture 100 (then 200) drops/day, royal jelly 1 g/day then gradually increased to 4 g/day, massage with bee venom cream (Apireven) and herbs (great mullein, cowslip, calamus, seabuckthorn, hawthorn, 1 liter/day; ashwagandha, bala, shatavari 3 teaspoons/day), ganoderma lucidum, ginkgo biloba. Apireven was very good for her, it improved circulation. After one month (Dec 2011) we started bee venom therapy with injectable solution (VeneX 10 from Apitronic Services, then venom solution from Epsicom Company), gradually increased. After 3 months (April 2012) she started the treatment with direct bee stings, every 2 days, dose increased from 1 to 13 bee stings per session (1-1-1-2-2-2 etc.), then decreased from 13 to 1. Bee stings were applied on the arms and on the spine area. Symptoms disappeared, feet and left hand are warm now. In November 2012 she stopped bee stings.

MRI in February 2013 showed disappearance of the active lesion.

Conclusion: bee venom therapy for one year (first 3 months with injectable solutions 1 mg/ml and 2 mg/ml and then with direct stings) together with the rest of bee products was enough to produce healing of the active lesion and disappearance of all symptoms. All this time she didn't do any other treatment.

**Case no 3. Mrs. P. V.,** age 52, 1,65 m/61 kg. Diagnosis: cervical myelitis (C1). First symptoms in autumn 2007: numbness in the occipital area, left ear and fingers of left hand.

Two or three weeks before this moment, she had a quarrel with her director (he shouted at her, she was very stressed because of this). In the same day had appeared unbalance, dizziness, nausea, then, fine numbness which gradually increased.

In October 2007 she makes an MRI which showed: a small demyelination corresponding of C1 spine, with a diameter under 1 cm (in the left part of the spine cord, at the junction between rachidian bulb and cervical spine cord, suggesting an inflammatory reaction – myelitis, demyelination/Multiple Sclerosis or infiltrative glioma).

She started the treatment with non-steroidal antiinflamatory drugs (Movalis), drugs for muscular relaxation (Mydocalm) and vasodilators (Sermion). Numbness from the face and head disappeared in 2 weeks.

All this time, patient was scared because she was afraid she had multiple sclerosis. In November 2007 she made lumbar puncture (to eliminate the suspicion of multiple sclerosis). The result was: Pandy's test weak positive (sign of weak inflammation), albumin 29 mg%, glucose level 59 mg%, 6 cells/mm³. Because they didn't appear markers for MS on CSF (IgG antibodies – oligoclonal bands), it was considered to be a cervical myelitis. The doctors recommended her cortisone (Medrol) and minerals (Calcium and Magnesium).

In December 2007, during the treatment with cortisone, numbness at the fingers of the left hand reappeared.

In January 2008 she started a cleansing diet, avoiding chemical additives in the food, white sugar, red meat, artificial juices. She started to take bee products (honey, 6 teaspoons pollen, 1g royal jelly, propolis tincture 60 drops, raw propolis 4-5 g daily) and medicinal herbs (marigold, hawthorn, St. John's Wort, black poplar buds, horsetail) – 4-5 cups of tea daily.

Symptoms at the first consultation (April 2008): numbness at the fingers of the left hand, with a sensation of electric flow; normal muscular force, good motor coordination; pain in her lumbar spine (L4-L5) – on the X-Ray of the spine spondylosis is visible. She started treatment with herbs (great mullein, lemonbalm, rosehips, calamus). The tolerance test for bee venom was good.

After a week we started intradermal injections with bee venom solution (VeneX 10), in small amounts, progressively increased from one week to another (from 0,1 ml to 0,5 ml). Administration was made in specific points from the lumbar and cervical spine, on the shoulders (locally painful points), at the elbow and left wrist (acupuncture points LI11, LI4, TH5, other painful points), with a frequency of 1 session/week. The symptoms disappeared completely after a month, but treatment continued, to normalize the MRI aspect.

In October 2008 (at one year after first MRI and 6 months after we had started apitherapy) she made a new MRI which showed disappearance of the demyelination area from the bulbo-pontine junction.

Conclusion: bee venom treatment with injectable solution 1 mg/ml (average dose 5 bee stings equivalent, one session/week, 6 months treatment) together with other bee products and medicinal herbs determined the disappearance of the cervical spine cord lesion (on the MRI) and of all the symptoms. Bee venom acted both on the neurological and on the inflammatory rheumatic conditions. This patient had also a very good compliance at the intradermal injections with bee venom solution.

Case no 4. Mrs. G. M., age 63, 1,63 m/72 kg. Diagnosis: cervico thoracic myelitis C2-T4.

Symptoms: terrible pain and numbness in both shoulders and hands, between scapulae, occipital headache, no answer to any analgesic (excepting Tramadol), unbalance. She couldn't sleep because of the pain.

Previously: two attacks of paralysis in 2005 and 2007 with strong pain. She was completely paralysed, she couldn't move and she felt only her right side of the head. After 3 months of cortisone (Solumedrol), her sensitivity reappeared, but also terrible pain in all the body, with sensory alteration (sensation that she has 4 arms and legs). She had a spinal meningioma (T12) surgically removed in 2007. After surgery her condition didn't improve at all. She was in the hospital for rehabilitation therapy for 7 months, she visited all rehabilitation services from the hospitals of Bucharest. Finally she restarted to move her body, but she had severe pain and unbalance. She said the pain was so severe that she thought about committing suicide. In 2009 she was prescribed an opioid analgesic drug which was efficient against pain, but produced her nausea and vomiting and severe dizziness (she couldn't take it). She went to an experienced neurologist since October 2007 and she takes vitamins and supplements. She used bee venom cream (Apireven) and her pain diminished.

She has a daughter with Dyke-Davidoff-Masson syndrome (DDMS) (cerebral hemiatrophy, she cannot use an arm and a leg), her mother has Alzheimer's disease, her father had Parkinson disease.

MRI from November 2005 showed a **cervico thoracic myelitis C2-T4 with remitting ataxic tetraparesis** 

The MRI showed a cervico thoracic infiltrative extended lesion of unknown etiology. The lesion affected the whole spine cord from C2 to T4.

First consultation in July 2011. I asked her to make some changes in the diet (she used to eat a lot of meat), avoiding meat, animal fats, white sugar and introducing all the bee products. She received pollen 2 teaspoons/day, propolis tincture 80 drops/day, royal jelly 1 g/day, Apireven cream locally (good effect, calming pain), herbs (calamus, yarrow, lavender, linden, melissa, poplar buds, hawthorn, mullein, ganoderma), colloidal gold. After one month of cleansing diet and bee products, I started bee venom therapy, one session/week. At the beginning I used VeneX 10 solution for 2 months (average dose 6 bee stings equivalent), then for the next 8 months, bee venom solution from Epsicom (2) mg/ml), increasing to 18 bee stings equivalent. Pain gradually decreased at 50% and quality of life increased significant. At the beginning of the treatment, she had some days with pain, but in time the effect of bee venom cumulated and it protected her from pain for several days (from one session to another), so one session/week was enough. So first time treatment was 10 months long (August 2011-March 2012). During spring and summer time (for 6 months) she felt excellent, she leaved the city and went somewhere in the mountains, she walked daily 2 km and used Apireven cream 3 times/day and it was good. When she returned in Bucharest in October 2012 pain reappeared. The new MRI in November 2012 showed the same aspect of the spine cord. Her

The new MRI in November 2012 showed the same aspect of the spine cord. Her neurologist considered that spine cord degeneration progressed but the whole spine looks better. She went to the hospital and took cortisone in high dose and her condition improved, but not so good as before. Neurologist prescribed her vitamins B and D and calcium.

In January 2013 she came again for the bee venom treatment. She accused pain and walking troubles, weakness in the right knee, spasticity. We restarted treatment with BV solution 2 mg/ml, 20 bee sting equivalent applied on the spine, hands and feet. I completed the treatment with ayurvedic herbs (ashwagandha, candana, bilva, atmagupta, gotu kola). We continued the therapy, 1 session/week, for 7 months (January to July 2013). To improve the results I taught her some yoga exercises to help her to balance Anahata chakra, which was most affected. She practiced and felt better with all the procedures. She was able to walk alone in the city (usually she needed somebody with her). Pain decreased even more and appeared rarely.

Neurologist adviced her to continue BVT if it was the only efficient remedy for her. She is sorry that she didn't know about bee venom therapy earlier, because it was indeed her best therapy.

Conclusion: In this case of severe myelitis, where no other treatment worked, BVT provided an excellent analysesic effect and significantly improved quality of life. Effects of the therapy were cumulative and they continued for months after stopping the therapy.

## **Conclusion:**

There is hope that, even for severe neurological diseases like myelitis or multiple sclerosis, apitherapy may help and increase quality of life, relieves symptoms, supports nervous system to recover and produces disappearance of MRI demyelination lesions. Dosage of bee venom has to be strictly individualized, tolerance and effectiveness is different from one patient to another. We have to use the smallest dose that shows the best effects.

In some cases (like severe myelitis), bee venom therapy can be **the only efficient remedy** that works for patients.