

**EXPERIENCES WITH THE PERCUTANEUS BEE-POISON THERAPY
IN THAILAND**

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When I came to Litcho (South-Thailand) in September 1940, I was surprised to see so many people suffering from the different rheumatic symptoms: The reason was not so difficult to ascertain: the air is very humid and especially the tunnel-men in the mines are much exposed to dampness, because they are working under very moist conditions in the tunnel. I remembered my experiences with the percutaneous bee-poison therapy, which I had used in Europe.

When Terc, in 1888, said: the bee-sting treatment against rheumatism is only a "cure of poor people", he surely could not know—although already very much experienced with this therapy—the great further development in this direction. Following the literature, published since that time, we see the marked progress of this kind of treatment made year by year.

Among the scientific publications we must mention especially the two dissertations of Langer, published in 1897 and 1899. He, as well as Flury, have worked intensively on the chemistry of the bee-poison; but unfortunately they were not able to analyse it. Nevertheless they could prove at least that the bee-poison—as thought originally—has nothing to do with formic-acid, but that there is a certain similarity with some kinds of snake-poisons. Both authors have fixed statistically that bee-masters nearly never contracted rheumatic diseases and that there were only unusual exceptions, (which were to state the principle).

When the bee-poison therapy, which had already been used by many primitive races, came again to our knowledge, many physicians used it with good results. The early authors put living bees on the skin, where the insects stung; later on injections were made of bee-poison solutions. Efforts, to apply the bee-poison as an ointment—i. e. percutaneous—were without any success for a very long time, as the bee-poison could not be resorbed ordinarily by the skin and—as we know well—it is without any effect on the uninjured skin.

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K. A. Forster, who for many years worked at the pharmacological institute of the University of Wuerzburg (director: Prof. Flury), finally succeeded to solve the problem of the really effective bee-poison ointment. The resorption was obtained through the combination with easily resorbably fat-matters and by the admixture of small crystals. These crystals injure the epidermis in a fine microscopic way without any macroscopic appearance; to preserve the ointment a small quantity of salicylic-acid is added. Schwab and others have stated, that all these admixtures, which are necessary for the resorption of the bee-poison, have not any mentionable therapeutic effect for themselves alone, because their concentration is too small. For instance only 0,1 gm salicylic-acid is contained in each embrocation and we know very well that, to get a real healing effect, we have to give this medicine in very much higher doses. It results therefore, that only the bee-poison is the effective and responsible factor for the therapeutic action and for the therapeutic result of the ointment.

Before reporting the cases treated by me, I like to mention at once a fact, peculiar as well as important: the experiments with the ointment showed that rheumatic people react very much better to the ointment than healthy people. Rheumatic people developed skin-irritations at the same spot of the skin only after several embrocations, while these irritations—when it was a patient without rheumatic disease—appeared sooner and especially stronger; sometimes even with formation of blisters. These irritations—when they appeared at all—disappeared and were healed very soon in case of rheumatism when the place of embrocation was changed. Anyhow it is understood of course that the compatibility shows large individual differences. The fact, that rheumatic people show absolutely a different behaviour from those, not suffering from rheumatism, proves without any doubt a certain relation between rheumatism and bee-poison, although we are taking at the moment a deeper insight into that relation. The application-technique of the ointment, which exists in two strengths, is easy; every tube has a graduation and by this the dosage of the ointment is already prescribed: following the prescribed procedure the skin-irritations may be avoided nearly entirely. I agree with Sell, who says that the embrocation must be made not only at the

extremities but also at the back ; this author points out that the bee-poison is resorbed all over the whole body and consequently it becomes effective for the whole organism. Schwab has given an embrocation-scheme and according to my experiences I find it quite practical: the first day he orders to rub in half a degree of the tube-graduation and on the following two days daily two degrees. After 8 days an interval of 4-5 days takes place and when the first cure was not effective enough, the cure has to be repeated.

As to the indications, wide experiences could be collected about the following diseases, where the treatment showed good results: acute and chronic rheumatism in the joints, rheumatism in the muscles, sciatica, neuralgias and myalgias (Sell, Moeller, Schwab, Gleichmann, Gruenewald, Schweitzer, Henssge, Rutenbeck, Spengler, Pribert and others). A special interest must be paid to the publication of Brandes, who also treated neuralgia of the trigeminus: he had an excellent success. The same author has given also a very useful contribution to the application-technique: he asks that the part of the body, to be treated, must be washed before the treatment with warm soapy water and to wipe it off before the embrocation; in other cases he saw that the application of dry heat before the embrocation was still better. I could not see any difference with the Brandes-method or without it, when the bee-poison ointment had to be used. Zachariae finally has made—on account of his numerous material—a very interesting observation: he found in cases of chronic joint-sicknesses, that the virulent cases show a very strong local reaction, whereas the cases with predominant toxic effects did not show any local reaction; also not during a long treatment. He was not only able to obtain a stoppage in virulent cases where only the small joints were affected, he could also heal several of these cases perfectly, and this must be considered a big success.

Finally I like to mention that the bee-poison ointment is very good also for the iontophoresis (electrophoresis). Rutenbeck, Spengler and Pribert took the anode, Henssge used the cathode. The resorption of the bee-poison seems to be accelerated somewhat by the galvanic current; but all the successes seem to be absolutely the same as by the method of embrocation.

When I enter now into the success of the cases treated by me, I would like to distinguish the following groups:

- a) acute sicknesses:—
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| 1) acute rheumatism of the muscles | 12 cases |
| 2) acute rheumatism of the joints | 19 „ |
| 3) acute neuralgia | 7 „ |
| 4) acute myalgia | 6 „ |
- b) chronic sicknesses:—
- | | |
|--------------------------------------|-----|
| 1) chronic rheumatism of the muscles | 4 „ |
| 2) chronic rheumatism of the joints | 5 „ |
| 3) chronic neuralgia | 5 „ |
| 4) chronic myalgia | 3 „ |
| 5) chronic infectious arthritis | 7 „ |

The results are recorded in the following table:—

Group.	number of cases.	healing after 1st cure.	healing after 2nd cure.	without success.
a1	12	10	2	0
a2	19	13	5	1
a3	7	3	4	0
a4	6	2	3	1
b1	4	0	4	0
b2	5	1	4	0
b3	5	0	3	2
b4	3	2	1	0
b5	7	1	5	1
	68	32	31	5

The percentage shows that only the total of 7,39% of all cases (including the chronic cases) were without any success and when we take the acute cases alone we have only 4,58% without success. It must be stated that especially even in chronic and obstinate cases good and quick successes could be reached. We must admit of course that 68 cases are not sufficient to get a definitive judgment; but by the fact that our results are nearly the same as those of the other authors we are allowed to state, without any exaggeration, that the bee-poison ointment is really a progress in the treatment of the rheumatism and we will have to consider it as the method of choice in many cases of

rheumatic diseases. Not only from the therapeutic point of view, but also with regard to the diagnosis (toxic effect or virulent case) we can say, that this kind of treatment is really a welcome enlargement of our medical therapy.

Discussion: The bee-poison ointment used, known under the name "FORAPIN," exists in two strengths: Forapin I contains 5% bee-venom and Forapin II contains 10% bee-venom. The ointment is not contraindicated in any case, whereas we know that the corresponding injections are contraindicated in any kind of kidney-diseases and heart-diseases with appearances of decompensation. The second cure was made in all cases with Forapin II and the control of the urine never showed any albumen (all necessary chemical reactions and examinations were carried out by W. Lennhoff M.Ph.). Up to now the healed patients have not suffered any new afflictions and 7 months have already passed: this shows a good result regarding the degree of permanency of the cure; particularly because these former patients were re-exposed to the same causes of their afflictions. Even the non-cured 5 patients — and this is very interesting! — do not show any deterioration of their state: the bee-venom at least stopped any progress of their sickness!

Summary: General review of 68 cases of different rheumatic sicknesses which were treated with bee-poison ointment has been given and it has been shown that the percutaneous bee-poison treatment is a useful enlargement of our medical therapy. The results must be considered as good and the percentage of successes is by no means smaller than those, reached by other authors who used bee-venom injections. The latter are sometimes contraindicated whereas no contraindication exists in using the bee-poison ointment. This contribution has not been made to carry on a controversy against the methods of bee-venom injections but we wish to emphasize that such a treatment by embrocation will be taken with very much more pleasure by patients who are anxious or superstitious against any injections.

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