

# Alternatives to the use of Cortisone

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## A. Introduction

Although the use of corticosteroids is accepted as a standard technique in the treatment of several inflammatory diseases, we must recognize that specific injection techniques of anti-inflammatory products are gaining more and more interest. Most physicians, however, tend to regard these techniques as marginal phenomena. The importance of these injections in the treatment of so-called inflammatory diseases is relatively unexplored and promises to be a fertile area for further investigation.

Since most physicians have never been trained in these techniques, they are anything but expert in this field. I think that every therapist should at least know about the existence of this strategy, even if he or she will not use injections in his or her own practice.

So, I will introduce to you today the therapeutical strategies that focus on injections of non-steroid products. Both chemotherapeutic and biotherapeutic products will be discussed, and several techniques of administering them will be explained. The clinical cases will try to illustrate my strategies.

I have more than ten years of experience with these techniques in my private practice as a general practitioner in Belgium, and I have noticed that there is a very broad spectrum of medical problems that can be managed with this injection strategy. Today, however, I will only discuss two examples of alternatives for cortisone: the treatment of musculoskeletal pain and the treatment of asthma.

Still, I do not make any claims about the injections described in this lecture, involving the prevention or cure of any disease. Maybe the effects that I have noticed in my private practice are no more than a sophisticated placebo. I cannot know that what I am doing is best for the patient unless this practice has been rigorously tested; to check the items that I suggest, large-scale clinical studies are necessary. This lecture can be regarded as an invitation to do so in the near future.

## B. The extra dimension of injections of biotherapeutics

I suppose that you are familiar with the use of biotherapeutics in everyday practice. Most of you use them in the oral form, as tablets or drops. Although you may not be interested in giving injections in your practice, I still think it is a good idea that you know about the enormous possibilities of these techniques. And it might give you a broader view on natural medicine, in its most modern form.

Several ways of administering biotherapeutics for injections are possible: biotherapeutics can be injected into acupuncture points, trigger points, tender zones in muscles, in joints, in connective tissue, in ligaments, in vessels, etcetera. The exact localization of the injection is as important as

the exact choice of the remedy itself (ref. 1, 2, 5).

### B.1. Injection of biotherapeutics is not a new strategy

Those familiar with biotherapeutics for injection know that many ampoules exist since several decades, especially in Germany. Especially Heel, Pflüger, Steigerwald, Dolisos, Cosmochema, Fides and Hevert are famous for their ampoule preparations. Thousands of them are injected every day, and clinical studies check their efficiency and control their possible side-effects (ref. 20, 21, 28, 29). A wide selection of homeopathic and phytotherapeutic preparations has been on the market in injection form for many years now, and they have been employed in daily medical practice with good success, especially by general practitioners, rheumatologists and orthopaedic doctors. Many authors have already mentioned the use of biotherapeutic ampoules for injection: Bianchi (ref. 3), Claussen (ref. 13), Coeugnet, de La Fuye (ref. 31), Diamond (ref. 44, 45), Fischer (ref. 36), Frase, Gellman (ref. 19), Graf von Ingelheim (ref. 27), Geyer (ref. 24), John, Kleinstoll, Küstermann, Lanninger-Bolling, Metelman (ref. 28, 29), Müller, Pollmann, Potrafki (ref. 21), Preusser, Reckeweg (ref. 14), Riley (ref. 16), Risch, Schmid (ref. 17), Subotnick (ref. 43, 48), Thiel (ref. 20), Timmerman (ref. 10), Vorstoffel (ref. 33), Wachter, Werthmann, Weiser (ref. 28), Zenner (ref. 29) and many others (see ref. 1: bibliography).

Since there was no specific name for all the methods that use biotherapeutics for injection on specific spots, I introduced in Belgium the term 'biopuncture' (ref. 1, 2, 5), in order to distinguish the use of 'biotherapeutics for injection' from other injection techniques, like homeosineatry according to de La Fuye (ref. 31), neural therapy according to Huneke (ref. 11), therapeutic nerve blocks according to Bonica (ref. 12) and mesotherapy according to Pistor (ref. 32). At the same time we want to give this injection therapy more attention (ref. 1, 5, 7, 9, 54, 55). It will make it more interesting both to orthodox doctors as to therapists in natural medicine (ref. 1, ref. 8). In this way, we shall stimulate its use, so that medical professionals can discover its effectiveness in everyday practice.

### B.2. When is it interesting to go for local injections?

The fact that we administer biotherapeutics as an *injection* gives them an extra dimension, which can be compared to a turbo-effect. The first impression of application by injection is a more rapid onset of therapeutical action than by oral administration. But, more important than this, we also see:

- segmental reactions when giving injections into the segment (ref. 1, 5),
- neuromuscular reactions when injecting into trigger points (ref. 1, 4, 18, 25, 39, 41, 54),

-energetic reactions when injecting into acupuncture-points (ref. 5, p. 32-40).

In general practice, biopuncture has proven to be effective for:

- sports medicine (ref. 9, 35, 43, 48, 53): acute injuries and inflammations, like tendinitis, tenosynovitis (ref. 19) and myositis,
- headache, migraine (ref. 1, 2, 5),
- allergy: asthma, eczema, hay fever (ref. 1, 2, 5),
- musculoskeletal pain like low back pain (ref. 1, 9, 40), neck pain (ref. 1, 9, 40), sciatica of muscular origin (ref. 50), polyarthritis (ref. 15, 36),
- gastro-intestinal disorders (ref. 1, 2, 5, 46): gastritis, colitis ulcerosa,
- acute and chronic inflammations of different origin (ref. 1, 2, 5, 22, 44, 45): bronchitis, cystitis, prostatitis, etcetera.

## C. Injection techniques

### C.1. Reflexzone-injections

Reflexzone-injections are given s.c. or i.c. in the zone of the skin that is corresponding with our target-organ (ref. 1, p. 45-48). These injections are given 3 times a week in acute diseases, once a week in sub-acute situations and once every month in chronic problems.

e.g. Echinacea on the thorax

An ampoule of Echinacea compositum is injected i.c. or s.c. into the reflexzone of the bronchi to stimulate the defense system. This is indicated when treating asthma or bronchitis.

Other ampoules that can be used are: Ignatia-Homaccord, Traumeel, Chiroplexan, Drosera-Homaccord, Engystol.

Case:

A man (49) with recurrent bronchitis and chronic asthma, came to see me because he had an allergic response to the antibiotics he had been given. He smoked 25 cigarettes a day, and showed no special signs on physical examination. Because I did not want to overlook any disease that cannot be cured with biopuncture, such as a malignant process, hypertension or cardiac insufficiency, the patient was checked by a cardiologist. Blood samples and X-rays of the thorax did not show any suspect findings.

In fact, the patient came to see me because he was proposed to start to take corticosteroid pills, which he refused. I told him that I could not promise him succes, and asked him to keep in touch with his doctor in long diseases. Every time the patient feels a new bronchitis is starting again, he comes to see me as quickly as possible. In such a situation, he comes three

times a week and I give him Echinacea compositum in the zones that are showing wheezing on auscultation. These injections are given subcutaneously. If the patient comes in the beginning of the inflammation phase (phase 2 in Reckeweg's table), he feels better after about 2 to 3 treatments; if he waits longer, it might take about 4 to 7 treatments.

When the patient waits too long, or when his general condition is very bad, the treatment takes longer to have an effect. In some situations, for example when an important bacterial infection is included, one can add an oral antibiotic therapy to the treatment. General practice has proven that biopuncture can be combined with orthodox treatments, if necessary. Of course, oral treatment with biotherapeutic products can be added, like I did in this case: the patient was put on Echinacea Cosmoplex (four tablets a day).

## C.2. Acupuncture point injections

Those doctors familiar with acupuncture, can enhance their therapeutic effect by injecting intracutaneously or subcutaneously a biotherapeutic product instead of dry needling. This method was mentioned before by de La Fuye, Geyer, Matz, Frase and many other authors.

It is theoretically possible to inject a *single remedy* into an acupuncture point that is known for certain indications. This combination of homeopathy and chinese medicine (homeosineatry) was introduced by de La Fuye. I will give you some examples:

Chelidonium on Liver 13 for drainage of the liver,  
Nux Vomica on Bladder 21 for gastritis ,  
Gnaphalium on Bladder 34 for ischias,  
Sulfur on Bladder 52 for eczema,  
Cantharis on Kidney 11 for cystitis,  
Lobelia on Kidney 27 for asthmatic bronchitis,  
Naja Tripudians on Bladder 17 for cardiac neurosis,  
Crataegus on Heart 3 for palpitations,  
Rhus tox on Gallbladder 30 for coxarthrosis,  
Echinacea on Jenn Mo 19 for cough, asthma, bronchitis  
Echinacea on Jenn Mo 22 (Ren 22) for cough, asthma, bronchitis  
Cocculus on Small Intestine 19 for vertigo,  
Lachesis on Bladder 31 for climacteric disorders .

It is also possible to inject a *complex remedy* on a certain acupuncture point (ref. 92, 122), like for example

Chelidonium Homaccord on Liver 13 for drainage of the liver,  
Solidago compositum on Bladder 52 for drainage of the kidney,  
Solidago compositum on Bladder 23 for drainage of the kidney,

Cralonin on Heart 3 for palpitations,  
Cralonin on Bladder 15 for palpitations,  
Engystol on Small Intestine 14 for asthma,  
Vertigoheel on Small Intestine 19 for vertigo,  
Mulimen pro injectione on Urinary Bladder 31 for climacteric disorders,  
Traumeel on Gall bladder 20 for headache,  
Spigelon on Gall bladder 20 for headache,  
Zeel on Gall bladder 30 for pain in the hip region,  
Pulsatilla compositum on Jen Mo 6 for activation of the defensive system.

It is also possible to inject a complex remedy into several points of an *acupuncture meridian*, like for example Discus compositum over the Gubernator vessel. Subcutaneous or intracutaneous injections are given on the mid-line of the back, or at the level of every vertebra in the region of the pain.

Case:

A housewife (35) developed pain in the low back after bending for some time. She therefore took to her bed and called the doctor. She was put into a plaster jacket for 8 weeks. 15 years later, she had a similar episode of pain. Whilst being immobilized (bed rest for 6 weeks), she developed a widespread pain in the back. These pains even occurred at night; X-rays and blood tests were negative. Since 6 weeks of bedrest did not help, and because she had problems taking pain-killing tablets, she wanted to try another strategy.

Since I didn't find any trigger points, I gave her intracutaneous injections with a mixture of 3 ml. Procain 1% and 2 ml. Discus compositum over the Gubernator vessel. Five injections at weekly intervals relieved her of the pain, but on going back to gardening she again developed pain in the low back.

Mechanical stress is a very important perpetual factor in low back pain, and a physiotherapist was asked to work on that matter. The latter discovered poor posture and abuse of muscles, and he was able to teach her how to use her back properly. By working on this matter, the patient discovered this was an important factor in the self-management of the healing process of her back, and she needed no more injections of Discus compositum.

### C.3. Triggerpoint-injections

Myofascial trigger points are a frequently overlooked source of musculoskeletal pain. Many authors state that the development of neural hyperactivity at trigger points is maybe one of the most common causes of musculoskeletal pain (ref. 4, 18, 25, 30, 51, 52). Still many family

physicians, rheumatologists, physiotherapists and orthopedic doctors do not recognize trigger point activity, or fail to deal with them in an efficient way.

Many physicians, including in particular F. Valleix, J. Kellgren and J. Travell, studied the clinical manifestations of referred pain from musculoskeletal structures (see ref. 51: bibliography). It was Steindler who, during the course of reporting how he was able to relieve 'sciatica' by injecting *Novocain* into tender points in muscles in the lumbar and gluteal regions, first called these points "trigger points". And it was the American physician Janet Travell who brought this term into general use when she came to recognize the importance of trigger points as being the source of pain in many commonly occurring musculoskeletal disorders (ref. 4).

As it was shown that it was possible to alleviate such referred pain by injecting trigger points with a local anesthetic, it was experienced (ref. 1, ref. 45 p. 222, ref. 54, ref. 55) that this could be accomplished even more simply, as well as more effectively, by injecting these structures with an ampoule containing biotherapeutic products.

"Arnica compositum" is a biotherapeutic antiflogisticum with a broad spectrum of action and a minimum of side effects. Especially the use of injections (e.g. Traumeel (Heel) or Chiroplexan (Pflüger), both of German origin) are very famous among general practitioners and orthopedic surgeons. This has been shown by several clinical studies (e.g. ref. 20, 29, 56, 57, 58). Recently, more and more authors have discovered that it can be a very useful alternative for the use of corticosteroids (ref. 1, 5, 10, 19, 53, 54, 55, 63).

Recently, Traumeel has been presented as a non-steroidal anti-inflammatory drug (NSAID) with similar mechanisms of action than the allopathic NSAIDs (ref. 19, 63). Unlike the allopathic NSAIDs which inhibit prostaglandin synthesis via the arachidonic acid pathway, Traumeel is supposed to exert its effect via the modulation of the release of oxygen free radicals from activated neutrophils, and inhibition of release of inflammatory mediators and neuropeptides (ref. 19).

These statements are still hypothetic until more research on this field has been done to confirm these mechanisms. Anyway, many medical doctors have experienced that Traumeel can be a safe and effective drug in the treatment of inflammatory reactions (ref. 4, 5, 9, 25, 30, 34, 52).

#### Case:

A 48-year old company director had frequent attacks of severe left-sided neck pain with restricted movements. Each time his orthopedic doctor told him he must have an 'inflammation'. He was treated with *Indocid* (indometacine) tablets, and by having his neck intermittently stretched and immobilized in a collar. On each occasion he obtained little or no benefit

from these measures. Recently, the pain attacks came more frequently and persisted for several days instead of several hours. His orthopedic doctor proposed corticosteroid injections.

In view of this experience he came to me for advice. On computer tomography a small hernia was discovered on C5-C6, but on the right side instead of the left side. On examination I found a very sensitive trigger point in the left levator scapulae muscle at the angle of the neck, and another one in the free border of the trapezius muscle half-way between the angle of the neck and the tip of the shoulder. Both showed a jump-sign; the patient told me he was never examined like this before, although he had seen several medical doctors for this problem. He also told me that he didn't realize that he had such tender spots in his muscles.

I made a mixture of 1 ampoule of *Traumeel* and 4 ml of lidocain 0.5% and injected the above named points. The injections were given at a depth of about 1 cm and were quite painful for a few minutes. When he came back to see me three days later, he told me that the day after the injection, he suffered a lot, but the next day he was feeling much better. I repeated the same treatment I did the first time. After 6 treatments the pain was completely gone and full movement of the neck was restored.

Remark:

It is important to realize that it is not always necessary to inject a trigger point to have clinical results. One can have very interesting results with stretch and spray techniques (ref. 4) and with ischaemic compression. When performing ischaemic compression, digital pressure is put on the painful spot until the radiating myofascial pain disappears. The latter might take a few seconds to a few minutes. The additional use of Arnica ointment, both on the trigger point itself as on the zone of pain referral, can bring extra relief. Of course, Arnica tablets or drops should be given during treatment.

Case:

A teacher (45) had severe neck pain since he had a car accident, 4 years ago. Since then, he had recurrent headaches on the left side and important restriction of neck movements, especially rotation of the head. He was referred to me, both because of those persistent symptoms and because his neck muscles had been in complete spasm since the previous two weeks. He had been ordered 6 weeks bed rest for all this, but things seemed to have steadily worsened. The patient refused to take any pain-killing tablets or anti-inflammatory drugs because he had a 'sensitive stomach'.

On physical examination we found that he had an important restriction of neck movements, especially rotation to the right side. A severe and painful contraction of the sternocleidomastoid muscle was found, and on closer



inspection I found that almost all the muscles of the neck were involved: the posterior cervical muscles, the levator scapulae, and the trapezius. On further examination, there were numerous, obviously very active trigger points in the muscles just mentioned, especially in the trapezius muscle. I prescribed Zeel ointment (to be applied two times a day) and Gelsemium Homaccord (four times a day). The trigger points were deactivated by injecting them with "Arnica compositum" (e.g. Traumeel) once a week. Since the patient was very anxious about getting injections, we started our treatment very 'gently': I injected only a small amount of liquid, and I added some lidocaine 1%. After 6 treatments, he regained full movements of the neck.

#### Case:

A secretary, aged 34, came to see me for acute neck pain. She showed pain in the neck, the left trapezius region and the left deltoid region since a minor car accident two weeks earlier. Oral non-steroidal anti-inflammatory drugs and physical therapy did not change the pain. RX of the neck was normal, NMR showed a hernia between C2 and C3. She was proposed to have an operation, but she wanted a second opinion.

Since the publication of a recent longitudinal cohort study (Spine 1996: ref. 37), we know that many cervical disc herniations can be successfully managed without surgical treatment. It is true that the efficacy of management for cervical radiculopathy resulting from intervertebral disc herniation by nonoperative measures has received limited attention (ref. 37, p. 1877).

I prescribed arnica ointment (to be applied four times a day) and Traumeel tablets (four times a day). She received injections with *Traumeel* (mixed with a local anesthetic) in the region of the pain, especially in the trapezius and deltoid muscle. These injections were given at a depth of about 1cm, three times a week. She also got injections with *Traumeel* in two myofascial trigger points. During the first week, her pain got worse the day after each injection. The second week she was feeling progressively better and better and she was without any pain after 2 weeks of this treatment.

#### D. Sport related injuries

By far, most of the sports injuries which I encounter are representative of the following heterogeneous group: soft-tissue traumata caused by the action of blunt objects, sprains, ruptures and tendon disorders involving tendinitis, strains and insertion disorders. The clinical symptom complex for these soft-tissue traumata is associated with inflammatory alterations of tissue. These are manifested by the five cardinal symptoms of

inflammation: redness of the skin (rubor), bodily heat (calor), swelling (tumor), physical pain (dolor) and loss of function (functio laesa).

The consequences of minor sports traumata appear as inflammatory reactions, that can be treated by anti-inflammatory products. The oral and local application of Arnica compositum can be very helpful in such cases.

The most common sports disorders in general practice are sprains, partial or total tears and tendinitis. When surgery is not necessary, when orthodox treatment is not sufficient, or when oral allopathic drugs are not indicated, the topical infiltration with non-steroidal anti-inflammation drugs (both allopathic and phytotherapeutic) can be an interesting option (see also: ref. 51).

For minor sport injuries, I can recommend the use of injections of Traumeel or Chiroplexan for acute inflammations, Arnica-Injeel for muscle strains, and Zeel (ref. 1, 2, 7, 9) for the more chronic inflammatory reactions. These products should always be injected as a mixture with physiological liquid and/or a local anesthetic. Such injections have to be repeated several times a week until complete cure (ref. 9, 51).

Dr. Subotnick, a famous foot surgeon in California recommends a combination of 0.5cc of the softening enzyme Wydase, 1cc Rhus Tox, 1cc Traumeel and 1cc Xylocaine shaken hard twenty times. He recommends this mixture for example in the treatment of pain in the heel chord sheath (achilles tenosynovitis); he proposes to give the injection between the tendon and the sheath once a week for three or four weeks (ref. 48: p. 181).

Injection therapy for ankle strains or sprains consists of a local anesthetic, combined with Traumeel (for trauma and inflammation) and Lymphomyosot (for swelling). Other combinations are worth to use, as Subotnick proposes: Rhus tox, Ruta Grav, Phytolacca and Stellaria (ref. 48: p. 199 and p. 205).

#### E. What if the biotherapeutic injections are not strong enough?

For major inflammatory processes or when the antihomotoxic remedies are not powerful enough, we have to look for stronger remedies. Since our goal is to avoid the use of cortisone, we try first with allopathic non-steroidal anti-inflammatory drugs (NSAIDs). These 'chemotherapeutic' drugs are stronger than Traumeel, but do not show the side effects of cortisone. Such a product can be added in our Traumeel-lidocaine cocktail.

So, one can try with a mixture of tenoxicam (Tilcotil) or piroxicam (Feldene) and add a local anesthetic and Traumeel (see also: ref. 51). Both Tilcotil and Feldene are designed to be injected in muscles, which means we can use them for myofascial trigger point injections. Tilcotil can also be injected intravenously, and some authors have interesting results when injecting it intra-articularly or peri-articularly. The latter technique was checked in a double-blind study in Brussels, Belgium (ref. 38).

Those allopathic products should always be used in a diluted way (half a normal doses, and adding several ml of physiological fluid and several ml of a local anesthetic), and should be injected with more care than a biotherapeutic one. I use them as a replacement for corticosteroid injections (see also ref. 51). Of course, some injections are given at the physician's own responsibility, when the product is used in a way for which it has not been registered. Tilcotil is officially designed for the intravenous/intramuscular injection only and and Feldene is officially designed for the intramuscular injection only. So, I can not make any claims about their safety and efficacy, until more large-scale clinical studies are performed.

#### F. Is it always necessary to give injections?

For those therapists who are not allowed to give injections, I can recommend to do trigger point therapy with stretch and spray, as Travell and Simons suggest. This is an easy and safe technique, and gives interesting results when dealing with several myofascial disorders. The patient is usually very enthusiastic, since he or she has almost immediate relief. Although this effect is temporary, long term effects are achieved with repeated sessions.

Even more interesting is ischemic compression. Ischemic compression is application of progressively stronger, painful pressure on a trigger point for the purpose of eliminating the trigger point's tenderness and hyperirritability. Similar to acupressure and shiatzu, the thumb is used as the therapeutic tool. But we do not deal with acupuncture points, but solely with active trigger points, which can be found by clinical examination. The thumb action blanches the compressed tissues, which usually become flushed (hyperemic) on release of the pressure. The use of Traumeel ointment during and after the compression, enhances the effects of the treatment.

The clinical effects of this technique depend largely on the skills of the therapist. When looking for the active trigger points, wall plates can help. Textbooks (Baldry, Travell and Simons) give more fundamental information on this subject. In Belgium, I am giving workshops on trigger point therapy, in order to show how this technique can be performed in every day practice.

#### Case:

A twenty two year old tennis player complains since three weeks about pain at the outer side of the right arm, radiating down to the hand. Dorsal flexion of the hand increases the pain; it is impossible to grasp objects with an extended arm (e.g. cup of coffee). His general practitioner said he had a tennis elbow, and prescribed a NSAID. But he had to stop that medication

because of gastric problems.

Clinical examination shows a painful zone in the right brachioradialis muscle and a small spot at the epicondylus radialis, that is painful on digital pressure. He had ischemic compression on two trigger points in the brachioradialis muscle, twice a week.

He also got a local application of Arnica comp. ointment (e.g. Traumeel) in the right brachioradialis muscle and on that small painful spot at the epicondylus radialis, three times a day. Additional oral treatment with Ferrum-Homaccord, ten drops three times daily, gave complete relief after two weeks.

Case:

A girl of twelve has suffered a contusion of the lateral part of the thigh while snowboarding. The examination on the same evening shows an obvious swelling of the thigh and an extensive haematoma. The region is very sensitive to pressure, and she refuses a local injection. I gave her Arnica comp. ointment (Traumeel ointment, which was cooled in the frigo) and she applied it every hour the first day, every two hours the second and third day and four times a day the three next days. Putting the ointment in a refrigerator before application gives an extra cooling down in an acute situation. As an additional therapy, she received Arnica comp. tablets: I told her to take them at the same frequency as the application of the ointment. I asked her to keep the tablets in the mouth as long as possible, to give the product maximum resorption via the oral mucosa. After six days the pain and swelling were completely gone.

## G. Conclusion

Although the use of corticoids is accepted as a standard technique in the treatment of several inflammatory diseases, we must recognize that specific injection techniques of biotherapeutic products are gaining more and more interest. Most physicians, however, are not familiar with these techniques. That is why I wanted to show the importance of these injections in the treatment of so-called inflammatory diseases.

When using biotherapeutic drugs, I have experienced that the combination of oral application (drops or tablets) and local treatment (ointment and/or injections) gives interesting results, both in acute as in chronic cases.

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