CLINICAL

J. Malzac

THE EXPERIMENTAL USE OF G-CSF IN IMMUNOBIOTHERAPY

Study of 33 clinical cases on the use of Granulocyte Colony-Stimulating Factor (G-CSF) in homeopathic dilution.

SUMMARY

G-CSF is part of the renowned family of stimulation factors used in anti-tumoral polychemotherapies. A specific cell known as T-Lymphocyte is the main culprit in damage to the immune system, deficiencies or autoimmune diseases.

Research on bone marrow transplants has shown that administering G-CSF increases the number of pluripotent mother cells and, therefore, increases the chances of the body's specific response against the attack that is underway.

The basic effect is obtained using G-CSF 4 C; in order to cause the body to react we use G-CSF 7C, 9C or 15C, depending on the pathology being treated. This study was carried out on 33 patients divided into 10 groups.

From the various clinical cases examined, it would appear that the homeopathic dilutions of G-CSF had a stimulatory effect on the differentiation system of the pluripotent mother cells, enabling the body to give a more balanced response to an attack on the functioning of this complex mechanism.

The clinical trial demonstrated that this synthesis method displayed a clear reactivity preference for lymphocyte production. In fact, if several types of symptomology are associated with it, the one that is dependent upon lymphocyte production is clearly the favorite, as resolution or reactivity at clinical level depends on the restoration of this phenomenon.

KEY WORDS

G-CSF, IMMUNOBIOTHERAPY, PHYSIOLOGICAL REGULATING THERAPY, HOMEOPATHY, IMMUNE SYSTEM

INTRODUCTION

Immuno-biotherapy, a specific branch of homeopathy, is making great strides - today's basic research enables any new immune discoveries to be scientifically adapted.

In this context, G-CSF is part of the renowned family of stimulation factors used in anti-tumoral polychemotherapies. A specific cell known as T-Lymphocyte is the main culprit in damage to the immune system, deficiencies or autoimmune diseases. Therapeutic solutions therefore involve regularizing this cell's production and functions. In order to encourage the regulation of the synthesis processes and activity of these lymphocytes, we need to go back to the origin of their manufacture - namely, the pluripotent mother cell that, via differentiation, gives rise to lymphoid precursors, and subsequently to B-, T- and NK-Lymphocytes. It is important to note that this cell differentiates itself in the medulla ossium and the blood, according to the body's needs, by generating other cell lines such as:

-platelets;

-polynucleated eosinophiles, basophiles and neutrophiles;

-monocytes and macrophages;

-erythrocytes.

G-CSF (in combination with Interleukin 6 and Interleukin 1) is one of the hormonal factors that make the mother cell differentiate itself according to the method indicated by the body.

Research on bone marrow transplants has also shown that administering G-CSF increases the number of pluripotent mother cells and, therefore, increases the chances of the body's specific response against the attack that is underway. The implementation of this complex cell system is dependent upon the messages given at the outset. If regularization is carried out quickly and in a balanced manner, the message passes through and the body begins to react. In theory, the role of starter for this process can be carried out by a homeopathic dilution of G-CSF, which establishes order to the operation of this method of synthesis, by setting off the correct cell production process. If the body has a delayed response during this precise phase, this may explain the pathology encountered in some patients.

One could therefore assume that under the effect of this impulse, the body would obtain a greater quantity of pluripotent mother cells and would have a better action on the pathology concerned, as the starter is purely physiological in nature. The explanation can also be found in Fractal Theory - a system that is regarded as being balanced still oscillates around the position of perfect balance, along the attractor, without

ever reaching it.

The differentiation of a mother cell according to the preferential method determined by the body - depending on initial conditions - follows the theoretical model of the Mandelbrot set, operating according to the principles of the Lorenz attractor. The homeopathic dilution of the initialisation factor - here known as G-CSF - produces an impulse that alters the system's balance. This system will then focus on the chain production of a large number of bloodline cells - i.e. it endeavors to activate the lymphocytes primarily - by creating a more appropriate response to a block in the immune system or an imbalance, even if it is only partial, that is responsible for that particular patient's pathology.
If we go back to the language used in fractals, we talk about the "butterfly" effect of the homeopathic dilution of G-CSF on the medullary synthesis of the blood line. This effect is quantified - or at least it is adjusted according to the severity of clinical symptomology - by using various homeopathic dilutions. The basic effect is obtained using G-CSF 4 C; in order to cause the body to react we use G-CSF 7C, 9C or 15C, depending on the pathology being treated, taking into account that the more serious and chronic the symptomology, the higher the dilution should be, according to the principle of stimulation for rebalancing a complex system.
The study was carried out over an initial period of 1 month, which was extended to 3 months or more depending on the results obtained and in accordance with the following protocol:
-10 drops of G-CSF 7/9/15C
-10 drops of G-CSF 4C in the morning.
For more serious cases, one subcutaneous injection twice a week.

Before beginning the protocol, the following tests were systematically carried out on the patient in order assess the stage of the disease:
-immunglobulins IgM, IgA, IgG, C3/C4 (supplementary factors in immune response);
-orosomucoids;
-haptoglobin;
-CRP;
-Direct and Indirect Coombs test;
-anti-tissue antibodies (Anti-DNA, antinuclear, antimitochondrial);
-lymphocyte typifying, where necessary.

The Merieux IMC multi-test (7 antigens and 1 control) was used in order to find the hidden immune blocks. A positive result would mean the prescription of the appropriate nosode (works of Dr. Lernout, Paris, France). Of course, this protocol was carried out in conjunction with classic biotherapy drainage, according to the criteria of Homeopathic Materia Medica.

CLINICAL CASES

This study was carried out on 33 patients, selected over a period of approximately 1 year, in order to identify under clinical conditions what possible action G-CSF in homeopathic dilution may have. The 33 cases in this study were categorized as follows:

Group
1. Allergies to nickel: 2 cases.
2. Psoriasis of varying clinical severity: 5 cases, of which 1 case of likely psoric arthritis.
3. Multiple Sclerosis: 3 cases.
4. Alopecia and selective reduction in lymphocytes: 1 case
5. Rheumatoid polyarthritis confined to the hands: 1 case
6. General articular rheumatism, linked to osteoporosis: 5 cases
7. Gougerot-Sjogren syndrome: 1 case
8. Atopic allergy of varying severity: 10 cases
9. Charcot Marie Thoot disease: 2 cases
10. Tumoral pathology: 2 cases
11. Anemia that is resistant to iron treatment: 1 case

▶ Group 1

This group includes 2 patients suffering from an allergy to nickel. In one of the patients, a dressmaker by trade, the skin symptomology involved only weeping eczema of the hands (the patient had not yet used steroidal anti-inflammatories). This allergy flared up immediately with just the minimum of contact with the sewing and embroidery needles. The second patient was a grocer who couldn't touch a single metal utensil. The allergy manifested itself in widespread eczema on all the skin surfaces. The patient's clinical history tells us that the eczema began on the hands and, with the increasingly frequent use of cortisone ointment, it gradually spread. The treatment involved hepatic and cutaneous drainage, as well as the prescription of Nicolum metallicum 9C - 1 dosing tube of granules every 10 days for 1 month. The immune count showed a tolerance stage with an inflammatory state. From the first administration of G-CSF - in a dilution of 7C for the first patient and 15C for the second - there was a worsening of symptomology with the appearance of edema, exudation and redness of the eczema patches. By suspending the treatment, the phenomenon subsided in 3 days. The treatment was restarted after 4 days. After a month of treatment, the symptoms on the first patient's hands had completely disappeared. The patient could therefore return to her dressmaking work full-time and no longer suffered any allergy to the needles. There was only a partial improvement in the second patient; the immune process was finally unblocked after administering 2 doses of Cortisone in a 30C dilution, at 10-day intervals. For the 2 patients the treatment with G-CSF 4C was continued for a period of 3 months and to this day the problem has not returned, despite continual contact with metal.

▶ Group 2

This group includes 5 patients suffering from Psoriasis. After the failure of classic biotherapy drainage treatment and

allopathic treatment, it was decided that a blockage in the immune system was to blame. This hypothesis was confirmed for 2 of the 5 patients who tested positive for anti-DNA antibodies and an imbalance in the immunoglobulins IgM and IgG. One of these patients also presented with a clear inflammatory component with arthritic manifestations in the wrists, particularly the left, and in two joints in the metacarpus and phalanx. The cutaneous manifestations were classic in terms of their appearance and location. When they underwent biotherapy drainage treatment, the 5 patients barely reacted. There was only a slight reduction in skin irritation and scaling, but no new patches appeared. Using this partial treatment, the disease had therefore only been balanced (partial tolerance stage). After treatment with G-CSF began - on the basis of the presumed immune block in the patient's reaction capacity - and the classic homeopathic worsening phase was overcome, there was a clear reduction in erythema and atypically located patches, and the gradual disappearance of localized skin thickening. In contrast, the typically-located psoric areas - elbows, knees, scalp - were the last to react. The localization on the scalp proved particularly resistant to treatment. For the patient suffering from arthritis, the treatment gave them a clear reduction in psoriasis patches; the joint inflammation that began after the prescription of a treatment specifically for this pathology was only blocked. The prescription of G-CSF continued for all the patients for a period of 2 months; as a result, we saw almost the total disappearance of cutaneous manifestations. The most misleading result was with the patient who presented with associated articular symptomology. In this case there was probably a block, due to inflammation, at the level of the mother cells' differentiation into T-Lymphocytes, in order to take the preferential route of the polynucleates.

▶ Group 3

This group includes 3 patients suffering from Multiple Sclerosis, a disease that can be fully diagnosed using classic methods. For one of the patients this treatment was their first therapeutic experience as they had only recently been diagnosed with the disease. These patients followed the therapeutic protocol for 1 year, taking 10 drops of G-CSF in 4C dilution every morning without a break. The first patient, a retired police officer, was suffering from serious ataxy of the lower limbs together with a reduction in the sensitivity of the upper limbs. The crises occurred monthly and were caused by stressful situations. The second patient, a professional singer, was suffering from claudicatio intermittens in the right leg, together with episodes of loss of consciousness when exposed to prolonged stress (singing) and clear depressive symptomology of reactive capacity. The crises occurred weekly and were resolved after several days. The last patient, a housewife, was suffering from Retrobulbar Optic Neuritis. The crises - which occurred every two weeks - led to episodes of complete blindness together with loss of motility in the lower limbs. On undergoing treatment, the patients displayed the classic form of homeopathic worsening and it was necessary to suspend treatment for one week. When the treatment recommenced, in combination with Belladonna 5C and Arnica 5C, there was a clear improvement in symptomology after one month, the crises gradually became less frequent and, in general, there was an improvement in their quality of life. After 2 months of treatment, the patients had returned to their normal activities and the crises had completely disappeared. The last 2 patients studied had gradually stopped taking a steroidal anti-inflammatory after the first month of treatment. From then on, there were no recurrences and when the drugs were suspended, no rebound effects were noted. We should point out that the clinical improvement was more rapid and significant in the patient who had not used conventional drugs. In the first days of treatment, all the patients reported a state of extreme fatigue, with the onset of sub-clinical and partial symptoms, corresponding to their individual symptomology. After 3 months of treatment, the patient who had presented with symptoms of the disease for a short time underwent a Magnetic Resonance Imaging (MRI) scan - there was an improvement of more than 50% in the number of demyelinating plaques.

▶ Group 4

This group includes an allergic and asthmatic 18-year-old patient, who was treated with specific vaccines for 3 years, and who presented with almost total alopecia. Immunological tests showed an imbalance in 3 immunoglobulins, a very clear anti-inflammatory component, and, above all, a 50% reduction in lymphocyte levels, with a selective reduction in T4 lymphocytes. After the first month of treatment, beginning with the classic protocol, laboratory tests were normal and, in particular, there was a normalisation of lymphocyte levels (although slightly higher than normal) and a re-growth of hair. In accordance with the patient's wishes, the treatment was not carried out in sequence. After twenty days, the patient recorded a general state of extreme fatigue and the reappearance of allergic symptomology (the vaccine therapy was interrupted at the beginning of the biotherapy treatment). The immune count carried out on the patient showed a marked lowering of lymphocyte levels. The patient declined a new cycle of therapy because he was going on holiday. After another month without treatment, the state of fatigue had worsened and the hair growth had halted. The immune count showed a marked lowering of lymphocyte levels, more than 70% of normal levels, with more than a 60% reduction in T4 lymphocytes, Interleukin 2 receptors and normal NK activity. The treatment was therefore recommenced with a dose of 20 drops of G-CSF 15C administered at 10-day intervals one after the other, in conjunction with 10 drops every morning of G-CSF 4C and Thymolin 9C. The solution to this pathology actually lay in thymic immaturity and a reduction in thymic function. After a month of this treatment, the va-

lues are now gradually beginning to go back up and there are only three areas of alopecia where there has been no regrowth.

▶ Group 5

This group includes a 35-year-old patient, who had been suffering from distressing rheumatoid polyarthritis in the hands for twelve years. She had the beginnings of joint deformation and motor rigidity due to painful joint rigidity. The immunological tests showed an imbalance in various immunoglobulins, significant inflammatory syndrome and a state of immune tolerance with limited values of anti-tissue antibodies. Apart from strong therapeutic drainage, the patient had not undergone any allopathic treatment, as for a year she had been suffering from the collateral effects of the cortisone treatments that she had previously undergone. At the beginning of the treatment the patient reported a clear worsening of symptomology, with the total failure of the hands and an increase in localized pain; this phenomenon, which manifested itself for 3 days, led to treatment being suspended for a week. Once the therapy recommenced there was a gradual improvement. After three months of treatment, articular motility had almost returned to normal and the patient reported rarely being in pain. She was able to go back full-time to her work as a teacher and is planning another baby.

▶ Group 6

This group includes 5 patients who presented with generalized polyarticular rheumatic symptomology which was resistant to numerous allopathic or biotherapy treatments. The five patients were aged between 70 and 80. In order to prevent the anticipated initial worsening, the therapeutic protocol was altered slightly. G-CSF 4C was used and the product was administered twice a week for a period of 2 months. A clear improvement in quality of life was recorded, with ease of articular movement and reduced joint inflammation. The balance of inflammation indices was also restored. The articular symptomology did not disappear completely but - according to the radiological plates - was localized at the level of the joint most affected (and not necessarily the joint that was the most painful at the beginning).

▶ Group 7

This group includes a patient who is a bank employee and who presented with Gourgerot-Sjorgren syndrome following the death of his father. The symptomology manifested itself in complete ocular dryness that forced the patient to use artificial tears frequently. The patient was extremely irritated by a permanent blepharospasm and a marked reduction in vision. The patient had already undergone two procedures for closing the lacrimal canals, with no effect on lacrimal function. The patient's nervous imbalance was rapidly restored with the administration of Arnica 30C and Nux Vomica 5C, both in granule form. After the first week of this treatment, the blepharospasm was becoming less pronounced but there was still no lacrimal secretion. The immunological test subsequently carried out, showed a state of tolerance without any alteration in anti-tissue antibodies. Two weeks after the beginning of treatment with G-CSF (according to the protocol and without initial worsening), the patient noticed a gradual increase in moisture. After a month of treatment, the patient's lacrimal function was restored and the blepharospasm had completely disappeared. In order to prevent a possible recurrence, the treatment was extended to 3 months.

Eight months after treatment began, the patient has not had any relapses; he has returned to his usual employment and, more importantly, has a perfectly balanced relational life.

▶ Group 8

This group includes 10 patients suffering from an atopic allergy that is resistant to classic allopathic therapy. They were all presenting with an extraordinary array of positive tests for various allergens, without ever having identified which allergen was responsible as the positive results were time-variable, despite the use of various specific vaccines. The clinical symptomology resumed in the form of rhinitis with catarrhal secretions from the eyes and nose and sometimes with asthmatiform syndrome. The age of these patients ranged from 7 to 25 with a concentration of patients around 18. These 10 patients were selected because of the failure of classic biotherapy treatment, after which they reported either an erratic or total lack of response, or immediate relapse once the treatment had ended. The use of G-CSF enabled all the patients to be rebalanced and, to date, none of the allergic phenomena have recurred. Their general state has clearly improved allowing them to resume their studies as usual. The younger patients noticed a definite growth spurt after recovery. This should be seen as a sign of the efficacy of the treatment.

▶ Group 9

This group comprised 2 patients aged 25 and 28, suffering from Charcot-Marie-Thoot disease. They were presenting with neurogenic atrophy of the peroneal and soleus muscles of the lower limbs. This disease began at the age of 10 in the two brothers. We should point out that one of their uncles suffered from the same disease in a less severe form. The older brother did intensive gymnastic exercises in order to develop musculature, in the hope of increasing the volume of his atrophic muscles; in contrast, the younger one did not participate in any sporting activities. The two patients underwent surgery to retract their tendons; the gait was almost normal, despite deficient plantar support. The younger of the two underwent treatment with G-CSF 4C in drop form, in the hope of stabilizing the symptomology. After an initial phase of being ineffective, lasting 15 days, the patient noted greater ease in his gait, and improved muscle tone in his calves. This enabled the patient to do a little jogging for one or two kilometres. His brother had localized treatment by means of subcutaneous injection at two-weekly intervals;

in order to reactivate the muscle more rapidly, the therapy was coupled with intensive muscle training. This patient immediately reported significantly improved muscle tone and response to training and, above all, an improvement in gait. At the third mesotherapy session, there was significant contractility in the upper part of the calves, with a clear increase in sensitivity in the injection sites (whereas, during the first mesotherapy sessions, the sites were completely insensitive). The muscle volume stayed the same. It would therefore appear that nervous flow was being transmitted more effectively and that the mesotherapy was significantly more successful.

▶ Group 10

This group included patients who presented with serious malignant tumoral pathology.

Group 10/A

This group comprised one patient aged 70 - she was a long-term smoker who presented with a malignant pulmonary tumoral process, which was inoperable, with tracheal flattening and the onset of the same syndrome in the upper cava as well. The patient had undergone radiotherapy sessions in order to achieve decompression and therefore have better respiration. The treatment with G-CSF 4C was introduced in the hope of combating the harmful effects of the radiotherapy (allopathic use of G-CSF) and triggering the patient's immune system in order to offer her an acceptable quality of life during her last months. Unfortunately, the patient died 6 months later as a result of a presumed embolism. She suffered very little and had reacted perfectly to the radiotherapy sessions. Even without the use of other medications - in addition to those provided for by the protocol - there was no manifestation of leukopenia or intervening episodes of infection. Her death was certainly accelerated by the untimely interruption in the treatment, after which there were symptoms of serious fatigue and bronchopneumonia that required traditional allopathic treatment.

Group 10/B

This group included one patient, aged 8, who had been suffering from an invasive glioma of the cerebral trunk for two years, with quadriventricular hydrocephalea that had required the insertion of a left atrioventricular external shunt. The worsening of symptomology had occurred very quickly following an attempt at intratumoral radioactive embolization, which only achieved localised necrosis at the center of the mass. After two months, this small patient was no longer talking; her physiological functions (urine and bowel movements) were very slow; hypotonicity had taken over the four limbs and she was being fed via a stomach tube. She was also presenting with bronchopneumonia, due to a long stay in bed and cystitis due to stasis. The patient had been treated with cortisone derivatives at a rate of one injection every three days in order to prevent episodes of endocranial hypertension. Given the seriousness of the case, the treatment was implemented as follows: Belladonna 5C, 3 granules 3 times a week; Arnica 5C, 3 granules 3 times a week; G-CSF 4C 10 drops a day; G-CSF 7 C/9 C/15C, 10 drops a day. After 10 days of treatment, her parents noticed that she had a more lively expression; she had regained her physiological functions (reappearance of the desire to urinate and defecate); and she had better emotional participation as she reacted with laughter and showed signs of response to various everyday situations. A month after treatment had commenced, the parents had successfully attempted to orally administer a little fruit juice, without using the nasogastric tube. It would therefore appear that this treatment had produced an anti-inflammatory decompression reaction and an immune defense reaction. The patient is only currently having one cortisone injection every 8 days and is better able to cope with the shock from this injection - she seldom reacts to it now, or not for 2 or three days at least (fatigue or fall in pressure). There were also no neurological episodes from the beginning of treatment with G-CSF. It appears that muscle tone has improved significantly as she can now stay seated.

CONCLUSION AND INTERPRETATIONS

From the various clinical cases examined, it would appear that the homeopathic dilutions of G-CSF had a stimulatory effect on the differentiation system of the pluripotent mother cells, enabling the body to give a more balanced response to an attack on the functioning of this complex mechanism. There is clear evidence of its impact on the immune system, offering the real prospect of improvement in the number and function of any T-Lymphocytes that are a little sluggish. The concomitant thymic stimulation and biotherapy drainage allowed for the improved efficacy of this protocol. It would appear that the dilutions of G-CSF acted as an initiator of the mother cell's differentiation processes, thus finally enabling the body to respond more appropriately to the requirement of a particular type of blood line cell implicated by the pathology underway. In a recent clinical picture of all the autoimmune pathologies, the use of this product allowed for the improved function of the body's specific defense that was affected, via modern homeopathic practice. The clinical trial demonstrated that this synthesis method displayed a clear reactivity preference for lymphocyte production. In fact, if several types of symptomology are associated with it, the one that is dependent upon lymphocyte production is clearly the favorite, as resolution or reactivity at clinical level depends on the restoration of this phenomenon. This would all seem to indicate that an attack on the immune system prevails so strongly that it has to be resolved before one can make the body react via other means. Indeed, the body's lymphocyte system is regarded as the basic foundation for its balance. ■

References

1. Sintesi di materia medica - Rapido, Dr. H.M. Lernout, documentazione european Olistic medical organization 1993.
2. Cytokine - Balkwill IRL Press, New York 1993.
3. Immunology in the 21 st century, F.W. Alt Sigma 1993.
4. Traite de micro immunotherapie dynamisee tone I/II oa Julian Librairie Le Francois, Paris 1977.
5. Le scienze n. 303 novembre 1993 vita, morte e sistema immunitario.
6. Cytokines: les cellules communiquent biofutur - Le mensuel Europeen de biotechnologie n. 121, marzo 1993.
7. Ki arai et al (1990) T cytokines coordinators of immune and inflammatory responses. Anno Rev. Biochem 59, 783-836.
8. E. De Maeyer, J. De Maeyer-Guignard (1988), Interferons and other regulary cytokines. J Wiley & Sons, New York, 488 p.
9. TM Dexter, JM Garland & NG Testa (1990), Colony-Stimulating Factors. Molecular and cellular biology, Marcel Dekker, New York, 412 p.
10. A Miyajima et al (1992) Cytokine receptors and signal transduction, Anno Rev. Immunol. 10, 295-331.
11. MB Sporn & AB Roberts (1990) Peptide growth factors and their receptors I, Springer-Verlang, Berlin, 794 p.

Author's address

Dr. Jerome Malzac
- Specialist in Human Anatomy and Embriology
- Specialist in Emergency and Catastrophe Medicine

Via S. Pietro in Lama, 90
73100 Lecce