CALCAREA CARBONICA*

Dr. William Gutman, m.d.

Calcium carbonicum originates from the fire-born granite rocks which form the greatest part of the earth crust. They are partly calcium silicates (such as plagioclase, amphibol, epidote, pyroxen) containing also aluminum and magnesium. Calcium itself, a white shiny metal, is not capable of existing under natural conditions, but wherever it appears it shows an inborn tendency to combine with water and with carbonic acid. The openings of the earth, volcanoes, gaps and fissures of the earth crust continuously exhale carbonic acid, the same as plants and animals; the gas emanates into the atmosphere, and the water vapours saturated with it fall down as rain and snow to start their work of destruction of the silicates. The countless water threads penetrating through fissures and rifts of the earth and the rocks, the wells and the brooks, the rivers and the streams, the oceans with their waves rolling against the rocky shores and cliffs, all work unceasingly to destroy the silicates by replacing silicic acid with carbonic acid. Thus the calcium is freed and combines instantly with carbonic acid to form calcium carbonicium. In the waters of the earth, containing more or less carbonic acid, it appears at first in its soluble form, as calcium hydro-carbonicum and is held in solution by the free carbonic acid. As soon as carbonic acid diminishes, partly by evaporation, partly by its assimilation by the green plants, calcium carbonicum precipitates either in its granular form as lime stone, or crystallized as common spar or calcite. There it develops a variability of forms surpassing all other minerals, even silica. Two thousand five hundred different kinds of calcite crystals are known up to now, demonstrating an extraordinary formative power working in this mineral. Besides its crystallized form the carbonate of calcium occurs in granular, lamellar, earthly, stalactite, tuberous, nodular and other imitative forms. It is carried in its soluble form by rivers and streams into the ocean. There a new cycle of its circulation begins. The oceans of a more primitive epoch had a more acid character due to a larger content of silicic acid and we find silica in the early organisms of the class of the radiolaria and foraminifera. The more the dissociation of the silicates progressed the more calcium was brought into the oceans. Life began to ascend from the depths of the ocean and approached the seashore. A new generation of living beings appeared in the course of this development, no more free floating in the softly undulating waves but exposed to the thundering storm of the surf. Life clung with tenacity to the rocky reefs of land and molluses and myriads of tiny polyps settled. For the first time a need arose for something to wrap

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up with to shelter the soft living substance and to provide it with stability. These tiny polyps, called corals, excreted ammonia and carbon dioxide which exchanged with the soluble calcium of the water. In this way calcium carbonicum was precipitated as a layer encrusting the tender animals with a protective cover and building up a skeleton of lime conforming to the inner structure of the corals. The parent layers died off, leaving their skeleton as a foundation for the colony and enormous masses of limestone were accumulated and laid down on the ground of the sea. In a similar way other inhabitants of the seashore, bryozoa; sea stars, sea-urchins, and lilies, also algae, built up a skeleton of calcareous plates. One of the greatest groups of the animal kingdom, the molluses formed by secretion of their mantle, a fleshy tissue fold, the shell: There are 80,000 different species of this class known, only one of them, for instance, the species conus counting 650 various forms—shells with beautiful shapes, designs and colours, a bewildering array, an amazing outburst of the enormous formative power of nature.

The ocean receded, violent movements in the earth crust displaced the underground of the sea which became land, and what had been once a part of organic life entered again into an inorganic cycle. The mighty accumulations of coral skeletons and shells towered as white gravish mountains of limestone. For the first time in the life of the earth organisms took part in the formation of the landscape, and it was the skeleton of the earth, the earth crust which they shaped and impregnated with the help of calcium carbonicum. Finally life ascended to land completely, and again calcium was needed to build up a firm structure adjusted to life on the earthy ground: Again it entered the organic cycle. The great class of the vertebrata was now in its shaping. The formation of the most richly organized and shaped organ, the brain, covered by the calcareous skull, became prominent and the formative power spread downward from the brain as its centre into the spine and reached out from there into extremities which could master the earth. With it went calcium to finish the organism, giving it a definite and enduring structure.

We find the formative forces concentrated in the brain and in the skeleton, and in the inorganic world particularly in the force represented by the element calcium. From this viewpoint it is interesting to learn that brain tissue has the ability to unite with calcium to a greater extent than other tissues, except cartilage (Schohl Mineral Metabolism). It appears like a sport of nature, foreshadowing future evolution when nature forms a calcium coral so astonishingly similar to the form of a hrain that it is called brain-coral.

Following the course of calcium through the world, we find it influencing the human organism in its characteristic way. It is of the highest importance for the regulating function of the brain: it develops here the same confining inhibitory action we observe everywhere in the body. The excitability of the brain as well as of the nerves is decreased by calcium, the motor area

becomes less irritable. It controls the passage of nerve impulses from nerve to muscle across the myoneural junction and acts also as an inhibitory factor on the transmission of the excitating processes through the synapses between nerve fibres and nerve cells. Decrease of calcium produces restlessness, twitching of muscles and finally convulsions. Its function in the nervous system is to keep the reflectory reactions in control and to decrease the excitability to produce a well ordered, voluntarily governed action. The effect upon the autonomous nervous system is generally stimulation of the sympathetic nerve, leading again to contraction and inhibition. The heart beats faster and comes finally to a standstill in systole, the vascular tonus increases, the walls of the capillaries become tightened under the influence of calcium. In a similar way it inhibits the motility and secretory activity of the gastrointestinal tract directly or through vagal depression.

The other tissue which attracts calcium in a high degree is the cartilage. The slow metabolism of the cartilage produces less carbon dioxide than the other tissues and therefore calcium becomes precipitated. With the help of the probably calcium-secreting osteoblasts and a ferment, phosphatase, the ossification of the cartilage takes place.

Most important is the influence calcium exerts upon the body fluids. We find its primary solidifying action again in blood, lymph and milk where it is indispensable for the process of coagulation. As ionized calcium it is the element which acts constantly against the liquefying and dissolving tendency of the other ions, and its chief function is to decrease the permeability of the cells by tightening the cell walls, thus consolidating the cell structure,

Looking back at the circulation of calcium on earth we visualize in all its functions the same force, a solidifying principle through which life materializes and which at the same time protects the soft and sensitive organs, like an oystershell, from which Hahnemann took its middle layer, to prepare a remedy he called Calcarea carbonica.

A new cycle started for calcium as it entered for the first time the diseased organism as a potentized remedy. If we look at the personality who needs Calcarea carbonica we may well get the impression of an oyster without a shell. There is a plump, flabby, fat and pale individual with a bloated appearance and soft, lax muscles; if he gives you his hand, it feels wet, usually cool and soft as if without bones in it, a flabby mass. Here and there the body surface feels cold and wet, cold sweat breaking out easily at single parts, particularly on head and feet, as if the body would liquefy. There is also a subjective feeling of icy coldness on different parts. The tissues are relaxed everywhere and there is no resistance in them. This individual cannot stand or walk for long at a time; he has to sit in a chair and slide down because he is so weak that he cannot sit upright. There is a general state of lassitude and laxness and the slightest exertion exhausts. He is extremely chilly and you have to close the windows, although he likes and

needs fresh air; because the slightest draught of cool air will bring him a cold or a rheumatic pain. He just falls from one cold into another. As easily exhaustible as his body is dissimind. The cleast mental effort knocks him out. The memory is weak, the brain as if paralyzed, there is no concentration power, the thoughts become more and more confused. There is a complete awareness of his mental weakness and of the utter inability to overcome it. This brings: about fear—fear that other people could detect his condition, fear that something evil may happen, fear that he could lose his reason. He becomes despondent with a sensitive, irritable mood, excited by trifles, open to every external impression which goes right through this weak and flabby mass. Unprotected as he is, he needs a shell. He needs the forces which are working in the formation of a skeleton or a shell—he needs Calcarea carbonica.

Whatever organ may be diseased, if this constitution is present, Calcarea carbonica will be the remedy. Nevertheless there is a special direction towards certain organ systems. The formative, solidifying properties of calcium point to its applicability in diseases of the cartilages and bones and of the nervous system. Softening of the bones, irregular distribution of calcium deposits in the bones, leading to exostosis, chronic inflammation of bones and joints is one field for Calcarea carbonica as a remedy. A state of irritable weakness of the nervous system, neurasthenia with its various symptoms, congestive headaches, sleeplessness, tendency to cramps and convulsions, epileptic attacks are some other clinical indications. As we found calcium in nature everywhere in the waters, and also tightening the organism against the overflow of fluids, we find its third particular field of action in the body in the countless channels with their interposed glands which carry the fluids to and from the cells, forming the lymphatic system. The constitution of the person who needs Calcarea carbonica is, so to speak, a watery one, unprotected against the overflow of the lymph fluid which transudates already under normal conditions, producing the bloated appearance. Already under the slightest inflammatory stimulus the flood gates of the lymph and blood capillaries open, and serum transudates into the interstitial tissue and covers the mucous membranes, bringing about lingering catarrhs of the various organs. In consequence of these inflammations of the lymphatic system the lymph glands become enlarged, hypertrophic, hard or suppurating. The mucous membranes are bloated and irritated by the chronic flow of secretions, they tend to produce polypi. There unfolds the whole pathology of what is called the leucophlegmatic constitution or exudative diathesis. Here too Calcarea carbonica develops its tightening, drying, consolidating qualities, which make it the great remedy of this constitution.

The provings give us all the most important modalities and accompanying symptoms of its effects, indispensable for exact prescribing in many different conditions which, however, all fit into the ontlined general picture. "For dust thou art, and unto dust shalt thou return." What remains

when life vanished long ago is the inorganic part of the body, the calcarea skeleton, the symbol of death. Wherever necrosis occurs in the body, the dying tissue attracts calcium, and if it is dead, calcium precipitates, calcification takes place. The less life in a tissue or organ the more it attracts calcium. Looking at man we see the most perfectly formed organs and parts of his body, rich in calcium, confining the human figure, putting as it were an end to its development. With silica we see the formative force still working in the softer parts of the structure, in the connective tissue. With calcium the definite materialization and crystallization, the end of the cycle of life occurs.

Between assimilation and dissimilation, form dissolving and form creating forces, between the overflowing forces of life and the solidifying forces of death oscillates the pendulum of evolution and in between its rhythmic cycle unfolds the picture of the living form.

DISCUSSION

od) Br. Hayes: That was a very fine exposition of the theory of calcium.

Dr. Huhbard: This paper of Dr. Gutman's like-the one on Silica last year, is pure joy, and I hope that he will be spared to us to go on at least once a year down through all the essential elements until we have a new materia medica signed "W. G."

Dr Grimmer: I think this excellent paper can well give us heart. Dr. Gutman is one of the younger members of Homoeopathy who are going to hring our great science forward. I am sure. With such an understanding and such a grasp, with the soul and spirit as well as the physical picture of our remedies, he really brings it out so that it is beautiful, poetic, true, and magnificent.

Dr. Woodhury: In the old days of Homoeopathy we had men who were peculiarly gifted in the presentation of our remedies, and those men were the ones who built the great materia medica. It was not only pure, as Hahnemann called it, but it was great. Now new presentations of this thing give us, as Dr. Grimmer mentioned this morning, new life in Homoeopathy. If we are to believe, as the Scriptures say, that the Lord said, "Let there be light, and there was light," it shows that there is this superstructure of our lives—the superstructure that we refer to or call the spiritual. One of the old poets among the Transcendentalists of New England had a line in one of his poems which started this way: "We are spirits clad in veils." These veils may be thick or thin, and the supporting structure of the whole human organism is the skeleton. You can see revealed before your very eyes, in the poetry and beauty of such an exposition as that, the whole plan of life itself.

Dr. Moore: That was a wonderful presentation. I enjoyed it very much. I am glad to have these young fellows working through on that line. It is the oyster without the shell, as we think of a great many things in our different remedies. Here is your calcarea fellow, flabby and fat. We can take almost

any one of these things that we picture as outstanding above almost any remedy and find very marked exceptions to that particular thing. One of the best calcarea cures I ever had was in a skinny woman, who was dark—and she wasn't at all flabby. She was quite sick, and she got well very rapidly. Calcarea seems especially adapted to children. Calcarea phos. and Calcarea sulph. I recommend particularly on children, as Sulphur and Iodine come rather into the adult picture.

Dr. Hayes: Dr. Kaplowe expressed an idea to me this morning that is quite appropos to this subject in reference to the mental symptoms that go with the temperamental appearance.

Dr. Kaplowe: Mental appearances always take preference over everything. The modus operandi of Dr. Gutman appeals to me, as it does to all of us, because of its depth and penetration. The spirit or the life is what he brings out. He speaks of What is a calcurea patient? It is the patient who needs a shell. That reminds me of Silica, one who needs grit or sand, but the difference between those two is that even though Silica is spineless, it is not so flabby. It needs grit. The sand is something to make it stand up. The silica patient is intelligent, is very brilliant, but he is afraid, he is timid, he is afraid of everything. The calcarca patient is stupid, besides being spineless. I think there is the difference.

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