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Beryllium metallicum



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SUMMARY

Acute viral respiratory epidemic diseases are more and more frequent, sometimes causing serious complications. What homeopathic treatment, used in addition to conventional treatments, could be indicated? The study of the *Materia Medica* of *Beryllium metallicum*.

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INTRODUCTION

We invite you to discover or rediscover a drug the pathogenesis of which is particularly interesting in this period of epidemic acute viral respiratory disease. *Beryllium metallicum*, a little known homeopathic medicine with pulmonary tropism, deserves to be revisited in order to use its therapeutic properties in this type of pathology, by applying the principle of similitude.

TOXICOLOGY

Lighter than aluminum, more resistant than steel, not much prone to corrosion, an excellent electrical and thermal conductor, Beryllium is a metal extremely useful in advanced metallurgical industries such as aeronautics, aerospace, nuclear and military industry. As Beryllium compounds have a sweet taste, it was sometimes also called glucinium.

Acute toxicological exposure

Symptoms are similar to those of pneumonia or severe bronchitis. The National Institute for Occupational Safety and Health (NIOSH) indicates that high exposures to beryllium cause an irritant chemical phenomenon of the lung mucosa with lymphocytic alveolitis which can lead to acute respiratory failure [1,2]. Secondly, in subjects acutely exposed to Beryllium, there can appear so called non caseous lung granuloma lesions which can become chronic [3]. Skin and eyes can be subject to acute irritation in cases of contact.

Chronic toxicological exposure

Chronic berylliosis disease is a granulomatous immune reaction. Captured by macrophages, beryllium is presented to CD4. Their proliferation contributes to the formation of immune granulomas and to the production of pro inflammatory cytokines [4]. The symptoms are essentially pulmonary and of variable evolution. Some people may present few symptoms, if any, for many years, only to see their breathing deteriorate. Among these symptoms are shortness of breath, cough, fatigue, weight loss, fever and night sweats. The symptoms are very similar to sarcoidosis [5].

If chronic berylliosis mainly affects the lungs, it can also affect other organs since beryllium can fix itself in many places. It may well settle on the liver (granulomatous hepatomegaly), the spleen, the kidneys (kidney stones), the heart (hypertrophy of the right heart), the nervous and lymphatic system.

Beryllium is classified as being carcinogenic for lungs (Group 1) by IARC and probably carcinogenic by the European Union (Group 2). Studies do not agree on this subject [5].

PATHOGENESIS

The first proving was carried out by W. Lees Templeton in 1953 on seven healthy volunteers [6]. This work was illustrated with clinical cases by WB Griggs in 1955 [7] and then synthesised and summarised by W. Gutmann in the British Homeopathic Journal in 1961 [8] and 1966 [9]. O. A. Julian published its *Materia*

KEYWORDS

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Medica in 1984 [10] and R. Serror a synthesis in 2000 [11]. Finally it is found in the *Materia Medica* of H. Neighbor [12], Vermeulen F [13] and Demarque [14].

STRAIN

Julian reported that the pathogenesis of Templeton could have brought up some symptoms due to the presence of fluor, impure beryllium containing beryllium fluoride.

Beryllium is in the second column of the second row of the periodic table of elements (Carbon line).

MATERIA MEDICA

We are mentioning here the main symptoms relevant to the field of acute respiratory pathologies as well as general signs and key symptoms which can lead to the prescription of *Beryllium metallicum* in **acute cases**.

General signs: severe asthenia with drowsiness, feeling the cold, and weight loss.

Psychological signs: anxiety with the fear of being seriously ill. Patient wants rapid therapeutic results.

Cerebral Signs: occipital and/or parietal headaches improved by fresh air, aggravated by coughing and movement. The pain goes from left to right (*Lachesis*), they are throbbing, with a feeling of bursting.

ENT signs: coryza with obstruction making one think of *Allium cepa*, dry, cracked lips, redness of the mucous membranes of the mouth and pharynx. Ulcers of the tip of the tongue. Shiny appearance (as if vitrified) of the mucous membranes (key-note). Metallic taste, burning and cutting dysphagia improved by cold drinks and eating (*Lachesis*). Tinnitus.

Intermittent fever, in spurts, beginning with chills, worsening from 23 hours to the morning, accompanied by great weakness and sweating.

Digestive signs: anorexia, feeling of fullness, of being bloated, aggravated by breathing in, nausea, improved when lying down and aggravated in the car; aversion to sweets.

Respiratory signs: inflammation of the larynx with hoarseness, dyspnea which worsens at the slightest movement, dry, painful cough, aggravated when leaning back and from the cold, improved in a warm room. The cough is spasmodic, seeming to come from the sternum. No or very slight sputum with a sweet taste. A little hemoptysis may be present as well as a feeling of chest oppression when taking a breath, wheezing and crackles on auscultation.

Radiological signs: blurred images, suggesting an acute pneumopathy. Micronodular infiltrate in chronic cases [14].

Cardiac signs: palpitations with sensation of lipothymia and weakness of the legs.

Locomotor signs: prickly back pain, with a feeling of cold in the lumbar area; pain like bruising of the limbs, pain as for a sprain. Finger clubbing (in chronic cases).

Urinary symptoms: increased porphyrinuria.

Skin signs: papular and itchy rashes. Skin ulcerations (in chronic cases).

Haematological signs: hypochromic macrocytic anaemia, leukocytosis, hypercalcemia, hyperproteinemia and increased sedimentation rate.

MODALITIES

Aggravation: physical activity, heat (except for cough), movement, driving a car.

Improvement: by cold and fresh air (except for cough).

Aversions: sweets.

INDICATIONS IN ACUTE PATHOLOGIES

All cases of acute viral affection (including the flu), where breathing difficulty (severe dyspnea and violent cough)

quickly become serious and where there is major asthenia. Also indicated in laryngitis, severe bronchitis and pneumopathy. It can be suggested in severe acute respiratory syndromes.

"Templeton proposed *Beryllium* in influenza and respiratory forms where dyspnea is more important than the physical symptoms lead one to expect, with muscular pains and other symptoms resembling those of *Rhus toxicodendron*" indicates TD Ross [15].

As for W. Gutman [9], he says "Think of *Beryllium* in all respiratory diseases accompanied by dyspnea at the slightest effort, often out of proportion compared to what is heard at auscultation, especially in cases of viral pneumonia, emphysema, bronchitis and bronchiolitis."

INDICATIONS IN CHRONIC PATHOLOGIES

This medication could be used for pulmonary fibrosis, sarcoidosis [14,15], tuberculosis, obstructive pulmonary disease. Indicated in cases of lung oedema and when granulomas are present. In oncology, it may be prescribed as part of supportive care, to patients with bronchial cancer with a painful cough, asthenia and anorexia.

DIATHESIC ATMOSPHERE

Psoro-sycosis and tubercular in acute cases; syphilitic in chronic cases.

COMPARISONS

Phosphorus and *Lachesis* in acute cases but also *Calcarea carbonica*, *Baryta carbonica*, *Calcarea silicata*, *Hepar sulfur*, *Magnesia carbonica*, *Strontium carbonicum* and *Causticum* in chronic cases [13].

KEYNOTE

Glossy, as if vitrified inflamed mucosa, as for *Apis mellifica* and *Lac caninum*.

Stubborn cough with retro-sternal pain [12].

CONCLUSION

Beryllium metallicum is a little known homeopathic medicine that deserves to be rediscovered. Given his *Materia Medica* rich in respiratory symptoms, in cases of similitude,.

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