# SILICA RESEARCH ABSTRACTS & ANECDOTES

# ACNE

Lassus A. "The effect of silicol gel compared with placebo on papulopustular acne and sebum production. A double-blind study," Journal of International Medical Research. 24(4):340-4, 1996.

Abstract Altogether 30 patients (19 females and 11 males), mean age 19 years, were divided randomly into two groups. All patients had chronic papulopustular acne of the face. A total of 15 patients were treated topically with Silicol gel for 20 min twice daily for 6 weeks and the remaining 15 patients were treated with a placebo gel in a similar fashion. A clinical evaluation was carried out at baseline, and after 2, 4 and 6 weeks of treatment. The clinical variables evaluated were as follows: number of comedones, papules, pustules and cysts on a standard area of the left cheek (area 5 x 5 cm) and measurement of sebum production on the same area by the use of Sebumeter SM 810 PC (Courage and Khazaka, Ltd, Germany). No concomitant treatment was allowed during the study period. One patient using Silicol gel withdrew after 2 weeks of treatment because of severe irritation of the facial skin, leaving 29 patients who could be evaluated. In the active group, the number of comedones decreased from a mean of 48.5 to 15.1 after 6 weeks of treatment. The corresponding figures for papules were 10.7 and 1.0, for pustules 6.8 and 0, and for cysts 0.6 and 0. In the placebo group no improvement could be observed. There was a highly significant difference in efficacy between the two groups (P < P0.001) in favour of the actively treated group. The mean sebum index was 193 at baseline and 88 after 6 weeks. Correspondingly in the placebo group the mean sebum index at baseline was 187 and after 6 weeks 179. This difference between the two groups was also statistically significant (P < 0.001). After a short follow-up period (3 months) no deterioration was observed in the 14 'active' patients, showing either complete cure or improvement

### ALUMINUM

Studies have shown an increase in urinary excretion of aluminum when taking silica. Animal fed a diet low in calcium, high in aluminum and low in silica results in accumulated aluminum in all areas of the brain. When supplemented with silica, no increase in aluminum occurred with the same diet. (Seaborn, Nelson, 1993)

#### **ALKALIZING EFFECT**

Organic Silica helps to excrete organic waste products urea and uric acid.

#### ARTHRITIS

Case 18.. Dr Jean Claude Mainguy, Director of Antiaging Centre, Montreux, Switzerland: "I had suffered from **arthritis** for a long time so I decided to try organic silica as a first remedy. In two weeks I had extraordinary results. All I can say is my arthritis was cured and has never reappeared. I then got more information on organic silica and I have taken it for all kinds of complaints, with very good results. Taking into account the fact that science is not always 100% accurate, results depend on many factors and are not fixed. Nevertheless for me this product is extremely effective."

Case 25.: 65 years Female Reasons for taking organic silica: Usual symptoms of **Rheumatoid arthritis.** Length of Time and Intake Frequency: 3 times per day over a period of three months. Pathological Record: Topical applications to the articulations Rheumatoid arthritis, diagnosed one year before and pharmacologically treated Pharmacological Record Cortisone (AR). Evolution and Observations: (after taking the organic silica). Total remission of algic symptoms. Patient claims a complete disappearance of pain. Patient recovered good spirit, plus emotional and physical state of mind Note: She has stopped taking cortisone.

#### ARTERIES

The quality of our arteries is determined by their flexibility and diameter. Silicon plays a key role on artery wall flexibility which is in fact, one of the tissues with the highest silicon concentration. The well-known French naturopath Daniel Kieffer, describes in his book "Anti stress and global health", an aorta which has suffered a stroke shows 25 times less silicon than a normal aorta. Blood vessels show high silicon content and the highest silicon concentration in the body is located in the aorta. The deterioration of elastic fibers in arteries is determined by the loss of silica. Elements which make up the connective tissues of the arterial wall in the cardiovascular system are: 25-30% collagen fibers, elastin fibers 30-40% and 30-40% muscle elements and fundamental substances, mainly mucopolysaccharides.

Silica level drops with age: arteries in children show a silica concentration 4 times higher than older people.

### ATHEROSCLEROSIS

The antiatheromatous action of silicon. Loeper J, Goy-Loeper J, Rozensztajn L, Fragny M.

Abstract Silicon is a constituent of connective and elastic tissues. Administered intravenously or per os in rabbits, it inhibits experimental atheromas normally induced by an atheromatous diet, making atheromatous plaques much rarer and lipid deposits more superficial. Though the mechanism of silicon's antiatheromatous action remains shadowy, the impermeability's rise of the arterial wall is probably not the only influencing factor, because the arterial walls of animals under silicon do show a higher lipid concentration with respect to control animals. The preservation of the structure of elastic fibers, as well as of ground substance, and the absence of an increase in oleic acid in the aortic wall may also explain the rareness of atheromatous plaques.

#### Schwartz K. "Silicon, fibre and artherosclerosis," Lancet, Feb 26; 1(8009):454-7, 1977.

Abstract A logical argument can be made for the hypothesis that lack of silicon may be an important aetiological factor in atherosclerosis. As silicic acid or its derivatives, silicon is essential for growth. It is found mainly in connective tissue, where it functions as a cross-linking agent. Unusually high amounts of bound silicon are present in the arterial wall, especially in the intima. Various kinds of dietary fibre have been reported to be effective in preventing experimental models of atherosclerosis, reducing cholesterol and blood-lipid levels, and binding bile acids in vitro. Exceptionally large amounts of silicon (1000 to 25 000 p.p.m.) were found in fibre products of greatly varying origin and chemical composition which were active in these tests. Inactive materials, such as different types of purified cellulose, contained only negligible quantities of the element. It is concluded that silicate-silicon may be the active agent in dietary fibre which affects the development of atherosclerosis. Two out of three samples of bran also had relatively low levels, which could explain why bran does not lower serumcholesterol. The fact that atherosclerosis has a low incidence in less developed countries may be related to the availability of dietary silicon. Two instances are presented where silicon is reduced by industrial treatment: white flour and refined soy products were much lower in silicon than-their respective crude natural products. The chemical nature of silicon in different types of fibre is not known. It could exist as orthosilic acid, polymeric silicic acid, colloidal silica (opal), dense silica concentrations, or in the form of organically bound derivatives of silicic acid (silanolates). Possible mechanisms of action are discussed.

Loeper and Golan studied the connection between the silica content in the tissue and the aortic atherosclerosis, showing that any lipid infiltration, involves a silica decrease in artery walls.

Moreover, a study carried out on 72 people over a period of 61 years, has demonstrated that **in arteries suffering from atherosclerosis, the silicon content is 14 times less than the content measured in healthy arteries**. This deficit mainly affects the medium and intima layers. Silicon gives flexibility to the arteries. (Desmonty 1988)

# **BACK PAIN**

Case 17. Mr. Frank Amy, Condestable de Grouville, Jersey: Suffered from **back pain** for the last eighteen years. He had tried all possible types of treatments, except: heat treatment, massage, aquatic exercises, three epidural injections, etc. "Over a period of seven years, I took Voltrol, starting with 25 mg per day but in January 1998 the dose had been increased to 100 mg. At that time, I started organic silica treatment giving up the previous treatment. In one week, as I said, I started feeling better, and in three weeks my back ache had almost disappeared. Over the past three months, I have gradually stopped taking organic silica, but I always keep a bottle in case it is needed."

Case 21.: 77 years. : Female Reasons for taking organic silica **Spinal disc herniation**, **(L4-L5)**, **degenerative spinal cord stenosis**, paresthesia and frequent fasciculations in EEII. Length Of Time And Intake Frequency: 10 ml/3 times per day for a month. (September 2004) 10 ml/once a day (1 time per day) (taken on an empty stomach) for one year. Once a day (1 time per day), direct application (facial senile spots)Pathological Record Dyscal hernia L4-L5 Degenerative spinal cord stenosis. Post traumatic hip arthroplasty. Post chirurgical fibrosis on L5-S1 that touches the dural sack and the S1 left infundibulum. Vertebral crush. Intraocular hypertension. Facial senile spots. Pharmacological Record Timolol: Ocular hypertension. Pergabaline: peripheral diabetic neuropathy and postherpetic neuralgia. Evolution: Remarkable improvement of health. Immunocompetence against infections (she has not suffered any kind of infection) Reducing facial senile spots. Fascicular pain relief Sleeping much better (she has stopped taking hypnotics) Comments: (after taking organic silica)

#### **BONE REMINERALIZATION**

Schwartz and Carlisle STUDIES. The following conclusions were obtained:

Silicon concentration is relatively high in calcification sites.

At the beginning of the decalcification process, silicon concentration in tissues dramatically decreases (up to 50%) compared to minerals such as calcium or sulphur that only decrease 5 to 8% (Desmonty, 1988).

X-Ray electromyography studies and punctures on rat bones show almost complete absence of silicon in mature bone. Silicon presence is associated with low calcium concentrations in osteogenesis areas. (Desmonty, 1988).

Experiments with rats fed on diets low in calcium since birth show the positive effect of silicon on bone and cartilage mineralization: rats fed on silicon supplement weighed much more than those which weren't given any type of supplement. (Desmonty, 1988).

Silicon concentration is high when calcification commences, then drops when the calcium concentration increases and is transformed into hydroxyapatite (a highly resistant mineral similar to marble).

The calcification and mineralised action of silicon occurred in these experiments during the first two weeks of life but after 5 weeks there was no difference between both groups of rats. With reference to human health, Tolonen (1995) pointed out that silicon intake is more important at low calcium contribution. Several researches have demonstrated low silicon diets may lead to a bone density reduction (Nielsen 1991). The effect of silicon has also been studied on teeth.

We must take into account that bone is basically made up of a matrix protein and calcium salts deposit. The fibrous matrix gives flexibility to the bone and supports tension, while calcium salt (65% of its weight) gives firmness and allows the bone to withstand pressure. In the bone formation, the

matrix components are considered to be produced first, (protein-polysaccharide, and collagen fibers) forming, through chemical modifications, a neat structure on which calcium salts are also deposited (Jacob Francote Lossow 1982). According to the information we have up until now, silica is said to be important in osteogenesis because it acts in the matrix production and the salt deposition in bones.

Further studies have also confirmed that silicon also contributes to giving form to the matrix tissue. In fact, several studies carried out by Calcagni (1984) on the tissue composition such as cartilage, the umbilical cord, etc.., it has been proved that silicon is linked to internal structures of polysaccharides biopolymers (such as hyaluronic acid, chondroitin, etc..) via non-reactive and extremely stable bonds. According to Calcagni, these results verify the role of silicon in transversal bonds between proteins and polysaccharides, or (just only) simply bonds in polysaccharides. This role is involved in the neat protein structure forming the osseous matrix. This applies to all the connective tissue.

After providing accurate technical data on silica concentrations related to several samples of animal connective tissue, Calcagni (1988) concludes as follows: "Current research suggests the structural role of silica in connective tissue, which is involved in glycosaminoglycan synthesis and in matrix mineralization."

#### **BURNS**

Case 1. - Certified by Doctor Denis G., Bordeaux: I Doctor Denis G. certify that on 14th November I examined 80 year old Mr. Rene Arnaez, diagnosing a **third degree burn** on his upper left limb. He told me that one minute after applying organic silica, the pain disappeared. The healing was satisfactory after applying poultices. A next visit on 17th November: no problems. Another on 21st November: we decided to leave the burn uncovered. On 27th November: Complete healing with scab, but no pain. N.B, Photographs have been taken at regular intervals to show the evolution

#### CARTILAGE

In vitro tests on cultured organs and cells (cartilage) in poor and rich silicon content culture medium show clear evidences on the stimulating effect in the course of developing silicon. Positive interactions have also been found between silicon and ascorbate in cartilage formation, giving a high proline and hexosamine production in presence of both compounds. Silica also increases hydroxyproline, the total protein and the non -collagen protein, apart from enhancing ascorbate effects.

In chondrocytes cultures isolated from chicken epiphyses, supplementary resources in silica showed an increase of nearly 250% in collagen, measured as hydroxyproline, in relation to supplements and also showing an increase of 150% in polysaccharides matrix.

# CELLULITE

1. Anti-lipid peroxidation action.

2. Antiglycation action (smoothing). It blocks the sugars and prevents their accumulation in the collagenic proteins, which reduces the rigidity of the collagen responsible for the appearance of dimpled skin. It also stimulates collagen synthesis. In this way, it combats ageing and the skin's elasticity is enhanced.

3. Draining action. It increases capillary resistance, reduces its permeability and activates circulation, hence promoting the drainage of toxic substances and excess water.

4. Reaffirming action on the connective tissues. It stimulates collagen biosynthesis, which makes up the largest part of the skin and hence achieves a reaffirming action.

A study carried out on 50 women who had Silicium Gel applied on the upper part of the legs and gluteus using a special plastic for four weeks so that it continued working overnight showed a reduction in skin irregularities produced by cellulite. The appearance of the skin at the end of the test, via visual evaluation having taken photographs, was considered to be noticeably improved

### CHOLESTEROL

The formation of cholesterol plaques runs parallel with silica losses: cholesterol plaques show a lack of silica.

The lack of silicon makes elastic fibers more permeable to lipids.

This lack of the elastic fibbers precedes fat and calcium deposits in arterial walls.

A greater silica loss will mean thicker cholesterol plaque calcification.

An artery suffering from atherosclerosis has from 10 to 20 times less silica than a healthy artery.

In 1988 Dr. Desmonty carried out a study on 72 patients aged 61 years old and she found that arteries suffering from arteriosclerosis showed a silica level fourteen times inferior to those of veins.

### **CHOLESTEROL PLAQUE PREVENTION**

Plaque formation process in arteries is developed in three phases:

Damage to interior arterial wall caused by oxidation (free radicals).

Due to oxidation, arteries become more permeable and allow fat deposits to form in damaged areas, at the same time scar tissue is being formed.

Calcium deposit in plates, which leads to the hardening of arteries.

Silicon protects arterial walls in those three levels. Several studies with rabbits (Loeper) showed that atheroma plaque formation goes from 80% (untreated animals) to only 25% in organic silica treated animals. Silicon decreases arterial wall permeability, increases the intercellular mass and thickness of elastic fibers. Silica acts by giving impermeability to artery walls against fat and calcium in blood. It also maintains a high level of hydrolases activity, which is able to transform esterified cholesterol into free cholesterol.

# **CIRCULATION (VASCULAR INSUFFICIENCY)**

Case 15. Dr. Rager **"Chronic coronary and arterial occlusive diseases of lower limbs** controlled by ionocenesis ("Agressologie", 1967, VIII): From 60 treated patients, 9 were failures (...). In another 51 patients, 43 in phase 2 and 8 in Phase 3, showing ischemic pain at night with initial gangrene, results were very satisfactory. Patients in phase 2, it decreases significantly and in 18 patients, it disappeared completely. The subjective improvement was together with an objective improvement of the geographical tracks registered with a plethysmograph. In Phase 3 patients, recovery is generally fast, decubitus pain normally disappear at the 7th session. The patient was able to sleep again with legs under the bed clothes. Initial gangrene steadily healed.

#### COLLAGEN

Iin vitro studies confirm the effectiveness of silica G5 in the production of collagen

The results show that organic silica G5 does not present any cytotoxicity regarding human fibroblasts. Assessment of collagen level Separation and identification of hydroxyproline was carried out by reversed-phase HPLC analysis. Fluorescence peaks, after integration, allowed calculating hydroxyproline concentration in the growing culture. The results show that organic silica G5 increases significantly the level of collagen produced by human fibroblasts (13% and 19%) compared to the sample reference. Conclusion In the experimental conditions undertaken by the organic silica G5, the following results have been achieved:

1. Does not induce cytotoxicity at 0.2%, 0.5% and 1% concentrations

2. It induces a significant increase in collagen level by 13% and 19% respectively at concentrations of 0.5% and 1% in human fibroblasts culture compared to the sample reference. To conclude, the organic silica G5 at 0.5% and 1% induces a significant increase in the collagen level in human fibroblasts culture. Institute of Clinical Studies, june 2008

### **CONNECTIVE TISSUE**

A bound form of silicon in glycosaminoglycans and polyuronides.<u>Proc Natl Acad Sci U S A.</u> 1973 May;70(5):1608-12

Abstract Silicon was found to be a constituent of certain glycosaminoglycans and polyuronides, where it occurs firmly bound to the polysaccharide matrix. 330-554 ppm of bound Si were detected in purified hyaluronic acid from umbilical cord, chondroitin 4-sulfate, dermatan sulfate, and heparan sulfate. These amounts correspond to 1 atom of Si per 50,000-85,000 molecular weight or 130-280 repeating units. 57-191 ppm occur in chondroitin 6-sulfate, heparin, and keratan sulfate-2 from cartilage, while hyaluronic acids from vitreous humor and keratan sulfate-1 from cornea were Si-free. Large amounts of bound Si are also present in pectin (2580 ppm) and alginic acid (451 ppm). The bound Si is not dialyzable, does not react with ammonium molybdate, is not liberated by autoclaving or 8 M urea, and is stable against weak alkali and acid. Strong alkali and acid hydrolyze the Si-polysaccharide bond. Free, direct-reacting, dialyzable silicate is obtained. Enzymatic hydrolysis of hyaluronic acid or pectin does not liberate silicic acid, but leads to products of low molecular weight still containing Si in bound form. It is concluded that Si is present as a silanolate, i.e., an ether (or esterlike) derivative of silicic acid, and that R(1)-O-Si-O-R(2) or R(1)-O-Si-O-Si-O-R(2) bridges play a role in the structural organization of glycosaminoglycans and polyuronides. Thus, Si may function as a biological crosslinking agent and contribute to architecture and resilience of connective tissue.

#### **CROHN S**

Case 2. - Ms. Valérie Z., 30 years, Roche-sur-Yon Patient affected by the **Crohn Disease.** On 8th November, blood tests show the following results: -Fibrin: 4,87 g/l (normal=2-4); -Haptoglobin level: 1,55 g/l (normal=0,7-3,8);-Reactive Protein C: 11,9 mg/l (normal=0-6). Treatment starts mid November; consisting of one spoonful of organic silica per day. On 6th January, the results are not very satisfactory and the problem gets worse. -Fibrin: 5,12 g/l; -Haptoglobin level: 2,11 g/l; -Reactive Protein C: 12,7 mg/l. On 5th January, she shows a slight improvement: - Fibrin: 3,81 g/l; - Haptoglobin level: 1,91 g/l; - Reactive Protein C: 8,92 mg/l. On 7th March, all results are normal: -Fibrin: 2,88 g/l; - Haptoglobin level: 1,69 g/l; -Reactive Proteín C: 5,6 mg/l.

After that date, all the results were normal and the patient was in excellent health. The following letter was written by the patient on 8th January: "Affected by a disease against which conventional medicine has no cure. For the last three years I have been treated with organic silica and since them, I have recovered as is proven by blood test (...) however; I stopped the treatment twice in a year. Each time I stopped, my health got worse "(as is shown on medical examinations)

#### **DENTAL/ORAL**

Pierre Plages and Norbert Duffaut "Some odonto-stomatology results obtained from organic silica derivatives ("minutes from the Physical Sciences Society Bordeaux, 1976-1977"): (...) in addition to its effectiveness, the organic silica offers several advantages: -- Excellent tolerance (over 250 ml can be injected per day). A local reaction has never been observed despite the presence of anaesthetics. This is

because of its anti-inflammatory property. This allows daily infiltration, with no risk of causing (such as chromium salts) undesirable reactions.

Organic silica can also spread into the tissues very fast, or by direct application (mouth wash, which allows the liquid to be in contact with mucous membranes for more than a few minutes, and not just a brief rinse). Preferably it should be applied by ionotherapy which shows no counter-indication and is more effective than infiltration -- Speed of action, greater than the rest of ingested drugs.

Conclusion: Experiments and comparative tests carried out over a period of five years, has led us to believe the efficiency of organic silica compounds when treating gums, epulis and in helping and aiding surgeries in mouth and dental extractions. At the same time, organic silica compounds reinforce anaesthesias and avoid alveolitis and other post-surgical inflammatory problems.

# **DIABETIC WOUND**

Case 16. Mr. A. L., Saint Seurin de Prats: "Diabetic, having pierced something into the sole of his left foot. "In May 96, I had a swollen leg with an **infected wound.** For 6 months, I was treated by both a dermatologist and my family doctor with no positive result. Early November, I was sent to hospital. After being informed of your discovery, (...) and with the consent of my doctor, I ordered 2 litres of organic silica (...). After applying poultices for a month, my leg began to recover mobility and the wound also started healing. I continued treatment until early September 97, applying at the same time bandages with Betadine. My wound has now healed. My doctor is very surprised and stated that in people suffering from diabetes, this type of injury does not normally heal".

### DIGESTION

Instestinal And Digestive Problems :Good results when dealing with all kind of gastrointestinal problems, colic, hiatal hernia, ulcer, bad digestions. Sometimes, a disturbance may be felt, but this will disappear after some days.(le Ribault)

### **DUPUYTREN S CONTRACTURE**

Case 3. Doctor Bernard D., Bordeaux: Certification related to the treatment of a patient suffering from **Dupuytren disease.** Net increase in the 4th and 5th finger extension. Excellent results

#### **FIBROMYALGIA**

Case 23. 48 years Female Reasons for taking organic silica: Polyarthralgia caused by fibromyalgia. Severe asteny. Length of Time and Intake Frequency 10 ml, 3 times per day for six months 10 ml/ once a day for six months direct application twice a day (fracture) Pathological Record: Fibriomyalgia diagnosed 7 years ago with treatment and medical monitoring. Idiomatic arterial hypertension. Severe asteny. Pharmacological Record: She does not usually take medicine. Results after taking organic silica: A slight improvement to the patient physical condition and mental state of mind is observed

# **FREE RADICALS**

Orgono Silica has a protector effect on fibroblasts cells by generating a lipid reorganisation of the cell membrane making it more resistant to free radical attack.

#### HAIR - THIN

<u>Colloidal silicic acid for oral and topical treatment of aged skin, fragile hair and brittle nails in females.</u> Lassus A. J Int Med Res. 1993 Jul-Aug;21(4):209-15.

**Abstract** In an open study, women with biologically aged skin and fragile or thin hair, or brittle nails were treated orally with 10 ml colloidal silicic acid (Silicol) once daily for 90 days and applied colloidal silicic acid to the face for 10 min twice daily. Of the 50 subjects treated, three withdrew from treatment after 30 days because of excessive drying of the facial skin due to topical application. In the remaining 47 subjects there was statistically significant improvement in the thickness and turgor of the skin, wrinkles and condition of the hair and nails.

#### **HEAVY METALS**

Ann Clin Lab Sci. 1996 May-Jun;26(3):227-33.

The role of silicic acid in the renal excretion of aluminium.<u>Bellia JP</u>, <u>Birchall JD</u>, <u>Roberts NB</u>.Clinical Chemistry Department, Royal Liverpool University Hospital, United Kingdom.</u>

Abstract: The chemical affinity of silicic acid for aluminium (AI) has been shown to reduce the bioavailability of AI in studies of human gastrointestinal (GI) absorption. Investigations were carried out to ascertain whether or not similar interactions may also enhance the renal excretion of AI by assessing the urinary output of both elements. Healthy individuals given monosilicic acid as naturally found in beer, excreted the majority of the silicic acid content (mean 56 percent) within 8 hours, concomitant with a significant increase in AI excretion (P < 0.05). Ingestion of increasing doses of silicic acid resulted in dose related increases in excretion of Si. Excretion of AI reached a maximum and then declined, consistent with depletion of AI body stores. This was confirmed using the 26AI isotope. The low serum but high urine concentration of Si suggests that if AI and Si interact to form an excretable species they do so in the kidney lumen such that Si limits the reabsorption of AI. Silicic acid's effect on the depletion of aluminium stores and reduced GI absorption suggest its addition to municipal water supplies may be a low risk public health measure to reduce the AI burden in the general population.

#### Hemorrhoids, Heavy Legs, Varicose Veins

Once the vascular walls improve, the bloodstream also improves. The organic silica also works on vein circulation problems such as hemorrhoids and varicose veins, fighting against the oedema and inflammation. It allows efficient improvement on the effects caused by varicose veins such as sore legs, itching/ heat, pain and acts against the hemorrhoids. (Le Ribault)

#### **HEPATITIS**

Case 4. - Mr. P.S., Bordeaux: Patient suffering from **hepatitis B.** On 31st October, blood tests show the following results: -Alkaline fosfatase: 511 U.I./l. (Normal: 60-170). -Transaminases SGOT: 76 U.I./l. - Transaminases SGPT: 63 U.I./l. On 11th November, treatment commences based on organic silica poultices applied to the liver overnight. On 19th November, the results are as follows: -Alkaline fosfatase: 295 U.I./l. -Transaminases SGOT: 44 U.I./l. -Transaminases SGPT: 49 U.I./l.

On 13th December, the doctor stated:"I have just examined Mr. S. His clinical state has improved over the last weeks. He gained 3 kilos in weight and has gained his appetite. The clinical examination is negative. The liver is almost perceptible. There is no abdominal pain. There are no oedemas on inferior parts of the body. The biological balance is also in net improvement. Transaminases level is normal, alkaline fosfatases are 240 units for a normal level inferior to 200 (...), I would like to examine this patient in a month's time, hoping that the present situation will continue. On 30th January of the same year, the results are as stated below: -Alkalinas fosfatases: 170 U.I./. -Transaminases SGOT: U.I./l. -Transaminases SGPT: 41 U.I./l.

On 2nd September, the patient wrote: "The result is fantastic, I do not feel tired, even although the pace of my work is as usual, travelling quite often during the last weeks. Likewise, I have overcome my sleeping problems. As an example: several days before treatment, going for a 5 km walk left me exhausted, having to suffer the consequences for three days. Over these few days, I have spent several hours per day visiting my clients in big cities without feeling tired. I have recovered the same capabilities I had before the hepatitis."

Case 9. Ms. L.G Royan: Patient suffering from **hepatitis C.** On 15th March, shows the following results: SGOT: 109 U.I/I. (normal levels ranges from 8 to 39) SGPT: 146 U.I/I. (normal levels ranges from 9 to 52) Gamma GT: 140 U.I./I. (normal levels ranges from 2 to 60) Alkaline phosphatases: 65 U.I./I. (normal levels ranges from 43 to 122) With her health deteriorating in July, the patient starts taking 3 tablespoonfuls of organic silica per day. Pads are not applied. On 9th August, the results are as follows: SGOT: 29 U.I/I. SGPT: 53 U.I/I. Gamma GT: 59 U.I./I. Alkaline phosphatases: 40 U.I./I.

# HERPES

Case 5. - Ms. A.D., Chemist: I hereby certify that for the last six months I have advised my patients to use organic silica based products, for **herpes** treatments. Verified by friends, patients and myself, I am absolutely sure there are no products on the market as efficient as the organic silica nowadays, not only as a preventive measure (in cases of crisis, commencing the treatment after the first symptoms) but also as a regressive measure for the people who are sensitive to the virus. I have also advised organic silica to combat **herpes zoster** (5 cases) with excellent results, as well as rheumatisms, arthritis, **articular rheumatism** (around 20 cases). Most clients came back completely relieved, asking for the product again.

Case 11. Mr J.R showed herpetic keratitis with cornea ulceration, intense lacrimation and a considerable conjunctive vessel dilatation, treated with cortisone eye drops but with no positive results. After applying organic silica, the inflammation disappeared within 24 hours, and in 7 days a scar was formed. 3 months later, the patient showed no after effects.

Case 12. Mr M.L suffering from **genital herpes** affecting the prepuce and glans. Organic silica moistened in cotton wool was applied directly three times a day to the affected area. After 3 weeks, the herpes had disappeared. After 3 months, the patient had no further outbreaks.

#### **HYPERTENSION**

Organic silica helps to reduce hypertension: its capacity to re-establish the arterial elasticity and balance bioelectric values of the cardiovascular system effectively combat hypertension. Studies in the 60's carried out in humans showed that in 4 to 5 days, arterial pressure was normalised Additional studies (Pometan 1978) have showed the antihypertensive effect of organic silica.

#### **IMMUNE SYSTEM**

Studies by Elsinger and Sciano concluded that silica produces a significant increase of lymphocytes and immunoglobulins (type G) A study with rabbits fed silica(Pernis &Panarentto) had an antibody production 13x greater than that of controls. Silica encourages the conversion of B lymphocytes into T lymphocytes

### INFLAMMATION

In Vitro studies have shown the anti-inflammatory and soothing action of Organic Silica against irritant and inflammatory agents (prostaglandin release) on human keratinocytes and its ability to decrease interleukin production protecting cells from inflammation.

# JOINTS

Osteoarthritis, osteoporosis, ankylosing spondylitis, and painful joints are conditions which silicon has known benefits. Silicon affects the initiation and rate of calcification of bone, important in disorders characterised by an imbalance between bone formation and bone resorption.

# LIGAMENT SPRAIN/STRAIN

Case 19. Dr John Mansfield, Director of BurghWood Clinic of London: I started prescribing organic silica for **muscular and ligament** problems, obtaining spectacular results. Now it is also prescribed for different pathologies and with no side effects or problems due to interactions with other medicines.

# LIPOLYTIC ACTION( breakdown of fat cells)

Clinical studies on adipocytes have demonstrated that Orgono Silica stimulates lypolysis to help smooth tissue and reduce stretch marks as well as act as an anti-cellulite treatment.

### NAILS BRITTLE

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# **OSTEOPOROSIS**

In osseous pathologies . Firstly we should take into account that at the beginning of the demineralization process, the silicon rate fell sharply: up to 50%; while the calcium and sulphur rate only fall from 5 to 8% (Desmonty 1988). In different bone pathologies a progressive silica loss has been found: osteomalacia, bone tuberculosis, osteosarcoma.

Supplementary silicon in postmenopausal women suffering from osteoporosis, not only inhibits bone demineralization but also increases trabecular volume, and mineral density.

Vitro experiments showed that silica added to osteoblasts and bone marrow cells, increase bone markers synthesis, including type 1 collagen, which is the largest organic component of bone matrix. Silicon increases bone matrix mineralization.

# **PROSTATIC HYPERTROPHY**

Case 24.: 64 years Male Reasons for taking organic silica: Post-surgical symptoms. **Prostatic syndrome** Arthralgias EESS Tendonitis (not well defined) in the scapular-humeral articulation Length of Time and Intake Frequency: 10 ml/ 3 times per day for three months Direct application several times per day on the genitor-urinary area Pathological Record Neoplasia operated 6 months before Arterial hypertension diagnosed 15 years ago. He does not follow any pharmacological treatment. Inguinal hernia at the age of 19. Prostatic hypertrophy. Pharmacological Record: He does not usually take medicine. Results After taking organic silica: Important decrease in arthralgias and tendonitis Complete disappearance of the prostatic symptoms Improvement to the patient physical condition and mental state of mind

### **PSORIASIS- PSORIATIC ATHRITIS**

<u>Colloidal silicic acid for the treatment of psoriatic skin lesions, arthropathy and onychopathy. A pilot study.</u> Lassus A. J Int Med Res. 1997 Jul-Aug;25(4):206-9.

Abstract In a randomized, double-blind study, patients with chronic plaque-type psoriasis were either treated with 30 ml colloidal silicic acid gel, orally, daily, and topically with the same gel (n = 15), or were treated identically with placebo gel (n = 15) for 3 months. One stable psoriatic lesion on the knee or elbow was treated topically and followed throughout the study. Five patients in the treated group and seven controls had psoriatic arthropathy and 11 treated patients and 12 controls had psoriatic onychopathy. Three treated patients and six controls withdrew because of skin irritation or lack of efficacy. In the treated group there were clear improvements in scaling, induration and erythema after treatment. The nail changes were cured in five of 10 evaluable patients in the treated group and joint pain was reduced by almost half in the four evaluable patients with arthropathy. There were no such improvements in the placebo group.

Case 6. - Doctor C.M., Sainte Colombe: I hereby certify that Ms J.L, affected by coetaneous psoriasis, is currently cured after being treated exclusively with organic silica.

#### SHINGLES

Case 5. - Ms. A.D., Chemist: I hereby certify that for the last six months I have advised my patients to use organic silica based products, for **herpes** treatments. Verified by friends, patients and myself, I am absolutely sure there are no products on the market as efficient as the organic silica nowadays, not only as a preventive measure (in cases of crisis, commencing the treatment after the first symptoms) but also as a regressive measure for the people who are sensitive to the virus. I have also advised organic silica to combat **herpes zoster** (5 cases) with excellent results, as well as rheumatisms, arthritis, **articular rheumatism** (around 20 cases). Most clients came back completely relieved, asking for the product again.

#### **SKIN MOISTURIZATION**

Orgono Silica has a regenerating role of the cutaneous layers which increases the thickenss and moisturization of skin due to its water holding capacity still evident one week after treatment.

# **SILICON** and **ORGANS**

A high concentration of silicon is found in organs and glands that do not require mechanical strength: thymus, adrenal, pancreas, spleen, where it plays a different role. Although it has not been studied in depth, it is related to bio-electronic functions. It is important to bear in mind that silicon as well as germanium, are transistors, able to easily mobilize electrons, which are used in electronic chips. In this respect, it can have a very important role as electron transport intermediary by amplifying the impulses between different molecules. This was suggested by Vincent, quoted by Monceaux in 1956. (Vincent was one of the bio-electronic pioneers). Some more modern authors as Fazekas, Schafer and Chandler and Bornens (mentioned by P. Creac'H) based on the presence of silicon aggregates in mitochondrias, centriols, and other cellular elements, have suggested this role, and have also added that they act as quartz regulating the pulses or very stable frequency signals governing the centriole movement.

### **SILICON and GENDER**

Gohk and School (quoted Desmonty 1988), observed 35% less silicon content on muscular tissue in females compared to those of males. (This could be explained by the differential potential on muscular power between both sexes).

# **SILICON** and AGE

Monclaux (quoted by Desmonty 1988) observed a general decline in silicon levels when aging. For example, silicon content in the integumentary system decreases by 30%; in the aortic wall as noted by Loeper, silicon content is 4 times higher in children than in adults. James Duke (1998) proved that when estrogen levels decrease with age the absorption of silicon reduces which at the same time, determines the tendency of decalcification, a symptom typical of menopause. Silica intestinal absorption also decreases with age (Desmonty 1988). Silicon content in the aorta, the thymus and skin in humans, decreases with age (Murray 1996).

#### SINUSITIS

Case 7. - Ms. Yvonne L., 85 years old: The patient has sufferd from **sinusitis** since 1920. 18-02-1922: Amygdalitis surgery and polyps removed. Regular Medical checkups (silver nitrate) of the polyps which cause nostril blockage. 1961: Puncture treatment. Bacteriological examen: Staphylococcus aureus=70% Friedlander Bacillus=70% 1962: Treated with Flabelline and (in october) Lantigen B. 1963: Treated with Auréomycine. 1964: Treated with Auréomycine and l Nibiol. Punctures in December. 1965: Punctures in March, as well as on December, 19th, 24th, 28th and 31st. 1966: Punctures (with Soludecadron) on June, 3rd, 10th and 17th. Simple punctures: on October 20th, 28th and November, 4th. 1967: Examination showing the existence of Staphylococcus aureus. Puntures with Diamante on June, 9th, 13th, 16th and 20th. 1970: Treatment with Locabiotal. 1971-1980: Improvement. None or few colds. 1981: Repeated sinusitis crisis, treated with Soframycine, Gomenol and Balsofumine M4%.1982: Ídem. 1983: Ídem until October, when an intense crisis occurs.

After 15 days of conventional treatment, there is no improvement. On 23rd October mid-day, poultices of organic silica are applied for the first time on the lower part of the nose. One hour later, mucosa appears, making her blow her nose all night. During the night, she applies organic silica again, and three times the following day, after this the patient feels better and can breathe as normal. 1996: She has not suffered from a sinusitis crisis for the last 13 years.

#### **WOUND HEALING**

Declaration under 37 CFR § 1, 132") carried out by Professor Jean Cahn (Director of Sir International Institute. Professor of Pharmacology and Neurobiology at the Faculties of Science and Medicine at the University of Pavia (Italy), former Director of the Centre for Experimental Therapies at Pitié-Salpêtrière hospital, Paris, former Director of Experimental Therapy and Clinical Research Institute, Paris)These tests were carried out by using organic silica Monomethylsilanotriol.

Tests carried out on animals: "Some tests were carried out on tricoloured guinea pigs with surgical wounds. They were treated with a lactate of organic silica. Each time, complete healing of the epidermis was observed, with collagen reorganization and a recovery of elastin fibers. Melanocytes

in treated animals increased by 80% and also did melanin production, compared to control animals where melanocytes were not activated by exposure to UV"

#### WRINKLES

In Vivo tests on deep, medium and surface wrinkles after 12 weeks(of around the eyes) demonstrated the smoothing effect of Orgono silica on wrinkles by 75%, 40% and 3% respectively as it promotes collagen production of the and organization of the extracellular matrix regenerating the skin.

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