## THE KALI SALTS

FRANKLIN H. COOKINHAM, M.D.

Many alkalies are used in our Materia Medica, but the largest group is represented by the kali salts. You will find in the index of Boericke's Materia Medica, 9th Edition, 25 members of the kali group mentioned. He gives, however, the symptomatology of only 13. In Boger, one finds 15 members mentioned.

These salts are tissue drugs in the widest sense of the term, "some of them very complex," says Allen, "producing profound and diverse alterations of both function and nutrition." Permit me, as an introduction to this group study, to quote the pharmacology of potassium from Cushny, 1947:

"Salts of the Alkalies:

1. Potassium Salts. Potassium is the important cationic constituent of the intracellular fluid being present in an amount which osmotically balances the sodium of the extracellular fluid. It is present in the blood in a concentration of about 20 mg. per 100 cc. Potassium constitutes an important and vital component of the cell and body fluids. Animals fed a diet practically devoid of the element soon die but since this element is present in large amounts of foodstuffs, a deficiency of it is not encountered clinically.

"Although an essential constituent of the body cells and fluids, potassium is toxic when present in excessive amounts. Following an intravenous injection of potassium chloride, this toxicity is manifested chiefly on the central nervous system and heart. In mammals the chief nervous symptoms are great muscular weakness and apathy. The respiration becomes rapid and labored, probably from the anemia of the center. Potassium first increases the activity of the spinal centers and then paralyzes them in mammals, but this is concealed by the depression of the heart when the drug is injected intravenously.

"The mammalian heart is also injured by the action of potassium when the salt is injected intravenously, as is

shown by weakness and dilatation, slowness of the pulse, heart block, and finally by ventricular fibrillation not infrequently; the fibrillation is due to a combination of increased automaticity and intraventricular block (Nahum and Hoff). The blood pressure falls abruptly partly from this action on the heart, which appears to be a direct one on the muscle, but a reflex vasodilation from an action on the carotid sinus may also play a part (Hauss and Shen). The poisonous action of potassium on the heart has given rise to exaggerated apprehensions of the danger of using its salts in therapeutics, and it may therefore be noted that potassium has no effect on the heart when given by the stomach, and that very much larger quantities of potassium are taken daily in the food by thousands of persons than are ever prescribed in medicine. The absence of effects from the potassium ion, when the salts are taken by the mouth, is due to their rapid excretion in the urine.

"When potassium salts are injected into an artery, so that they can reach the peripheral vessels before the heart, they cause marked vaso-constriction with an abrupt rise in the blood pressure; this action appears to be a direct one on the walls of the arterioles for the most part, though it is possible that this is reinforced by stimulation of the medullary and spinal vasomotor centers."

> REGION OF ACTION Motor centers of the heart Mucous Membranes, kidneys Blood and glandular organs

GENERAL SENSATIONS Sharp sticking pains Weak, chilly

GENERAL MODALITIES
Worse mornings—after sleep
Cold—exertion
Better—warmth, rest
Anemic diet

First the sphere of action of these members centers around motor centers of the heart, the mucous membranes, kidneys, blood and glandular organs. These are the regions particularly involved. General sensations: pain of a particular type. It may be the sharp sticking ache or electric pains, and nearly all of the kali patients are weak and chilly. General modalities are similar: aggravated in the morning after sleep, by cold and by exertion. Most ameliorated by warmth, rest and anemic diet. I will enlarge somewhat on the regions involved. All have inflammation of eyes, nose, mouth and throat. Nearly all of the kali group have bad breath, particularly in the morning, bloated face and a sickly expression. Mucous or muco-purulent discharges, a congested condition of lungs, chest, and here you find them heart and circulatory depressants; constipation with hard difficult stools; weakness of sexual powers and weakness of lower extremities.

"A negative point of great value is the absence of fever. I would have you never forget that only in the most exceptional cases can any potash salt be indicated when there is fever. They are applicable only in a condition of weakness, soft pulse, coldness, general depression, never excitement, certainly not febrile excitement." (Am. Inst. Hom. '94).

Kali Ars. Region—Cardio-vascular; skin. Modalities—touch, noise, change of temperature; cold feet 1 A.M. to 3 A.M.

Its region of action is the cardio-vascular system and the skin. The condition is aggravated by noise, touch, cold feet and particularly so in the early morning hours. Kali ars. patients usually have a skin disease, especially those of the pustular type. Acne aggravated by menstruation. Kali ars. is a particularly useful drug for eczema. This is a disease which requires a great deal of individual treatment. I find that kali ars. patients have marked itching aggravated while walking, undressing and from heat. The same is true of psoriasis and lichen. One finds in cases of

children where bends of elbows and knees are involved, that kali ars, is useful.

Kali Bichromium. This drug was proved by Drysdale of England. Report published in 1864. Region, M.M.—nose, air passages, pharynx, stomach, duodenum. Joints, skin, circulation, kidneys. Root of nose, tongue, penis. Modalities—Worse—cold, damp air, spring, undressing, mornings, 2-3 A.M. after sleep; hot weather; alcohol. Better—heat; motion.

Its region is mucous membranes of the entire air passage, nose, gastro-intestinal tract, the joints and the skin; circulatory disturbances, kidneys, root of tongue, nose and penis. Its modalities are a little bit broader than those of the previous remedy. Cold, damp open air aggravates. It is a periodical remedy. One finds aggravation during the spring. There is more aggravation in the morning between 2 and 3 A.M.—after sleep and again in hot weather, by the use of alcohol. Ameliorated by heat and motion.

Certain characteristics of kali bich. One is the character of its secretions. The tough adhesive character which is found in the infections of the air passages (hydr. iris v. lyssin.). Kali bich. has formation of false membranes. I remember a case of a young woman about 26, temperature 102, extreme weakness of lower limbs, false membrane in throat, tonsils previously removed; membrane extended down both sides of naso-pharynx, marked fetid breath. I gave kali bich. in 24 hours the temperature was normal, most of the membrane had disappeared.

There is a jelly-like mucous in kali bich, characteristic of this remedy round and punched-out ulcers. Ulcers of the stomach suggest this remedy. In pains of the wandering type (benz. acid. led. puls.) where the pains jump from part to part, especially in rheumatic conditions involving the various joints. Pains cover small spot, can place finger on that particular point of soreness. However, there are other remedies suggested here such as ign. thuya. Definite soreness, area of inflammation, suggests puls.

Alteration of symptoms (pod. cim. acid benz. psor. plat.). There is hair-like sensation in fauces and left nostril and on tongue (natr. mur.).

Indigestion from too much drinking, particularly true, I think with some Italians. Kali bich is used in syphilitic ulceration, other skin conditions, mucous membranes, more especially of the nose and throat. Complaints in early summer and in autumn.

Kali bich. deserves more specific mention, especially in its effects on mucous membranes of the stomach. Stitches in liver, extending through to the back. One of the few remedies that we have for stitches extending from navel area to the back. Worse from eating certain things like acids and drinking beer, but generally better from eating. Fat, lymphatic and lethargic type of individual. Complaints aggravated in summer and autumn.

Leading indications:

Aggravations. From eating (gastric pains and cough) coffee, 2-3 A.M. (cramp and cough) 9 A.M. (headache) open air (gastric complaints) uncovering, cold weather, rest, sitting, autumn and spring.

Ameliorations: From eating (rheumatic pains) open air, wrapping up, warmth, pressure, moving the affected part.

- 1. Toughness and adhesiveness of mucous, secretions (hydrastis, iris v. lyssin.). The formation of false membranes.
  - 2. Discharges of jelly-like mucus.
  - 3. Round punched-out character of the ulcers.
  - 4. Wandering character of the pains (benz. led. puls.).
- 5. Pains over a small spot which can be covered with the point of the finger (ign. puls.).
- 6. Alternation of symptoms (act. benz. ac. psor. plat. podoph.).
- 7. Hair sensation in fauces and left nostril (on the tongue natr. mur.).
  - 8. Indigestion from beer drinking.

- 9. Syphilitic ulceration whether of skin or mucous membranes, especially of nose and throat. Vincents Angina.
  - 10. Most suited to fat, lymphatic, lethargic people.
  - 11. Complaints worse in early summer and autumn.

Kali Bromatum. Proved by Dr. Hering and Hermerdinger, 1838. Region—mind; nerves, spine, genital; larynx; skin. Modalities—mental exertion; emotions, periodically; sexual excesses; when busy.

A very useful remedy, one that is especially mental in action. Region of action, mind, nervous system, spine and larynx. Aggravation from mental exertion periodically and sexual excesses. Amelioration, when busy. I have in mind the case of a youngster, 13 years old who was unusually fatigued toward the end of the week, so much so that it was necessary for him to go to bed. He was kept in bed over Saturday and Sunday and permitted to return to school on Monday; but the school activities seemed too much for him. I prescribed kali brom. after noting that he was worse by his application to school work, and after taking this remedy for four weeks, the child was able to handle the school work quite satisfactorily. Kali brom. has anæsthesia of various parts, particularly of the tongue where an examination may be made with the aid of the anæsthesia of the base of the tongue and mucous membrane of the throat, with complete loss of sensation. One of the books gave the symptom of induration of the womb. I am not familiar with its use in this condition, but have found it excellent in the treatment of pelvic conditions.

This remedy is particularly good for epilepsy from sexual irritation. I am not familiar with it on coughs of various kinds, but I have found it useful for the spasmodic type. Acne of the skin. Here we come close to the homeopathic similimum in the use of the drug in acne. Blind intensely painful varices.

In the sexual sphere, spermatorrhœa, with spinal cord irritation. It is the best remedy in nightly emissions. Long

lasting scrofulous ulcerations which are seldom seen today. "Fidgety" hands, constantly moving.

Kali Carbonicum. Proved by Hahnemann. Used in 30X.

Region-

Muscles; heart, uterus.

Ligaments: lumbar.

Serous M., M.M.: chest, right, lower joints.

Eyes: Blood. Left Side.

Modalities---

Worse—cold: air, drafts, changes after overheating and exertion.

Time—2-3 A.M., winter, before menses.

Lying—on painful side, left side.

Loss of fluids, after labor.

Better-warmth, sitting, bending forward, knees on elbows.

Kali carbonicum has a wider range of action than any of the other salts. Muscles of the heart and uterus. Ligaments in the lumbar region; mucous membranes especially of the chest and eyes, and blood. This salt is left sided. Its modalities are a little greater than those of other remedies in this group; aggravated by cold air, cold water, drafts, susceptible to changes, especially after overheating or exertion. Time of exaggeration is practically same as kali bich.; 2 to 3 in the morning; in winter, whereas kali bich. is in spring. Lying on the painful side, opposite to kali bich.; aggravated lying on painful side or on left side; also loss of fluids. Ameliorations are warmth, sitting forward with elbows on the knees, a particular method of amelioration in kali carb. Time of aggravation not limited from 2 to 3 but from 1 to 5 A.M. Kali carb. is indicated where one gets earlier or later aggravation in cough or dyspnœa, but particularly so in cases of sleeplessness and mental symptoms. Great sensitiveness to cold air and with cold weather, constantly taking cold. One of the remedies extremely sensitive to touch and also to noise. Noise aggravation might suggest various other remedies (nux vom. strych.). Nervimuscular system, pains sharp, stitching or aching, rheumatic in character. Sudden pains during rest, worse from lying on affected side (opposite bry.). Under kali carb. aversion to being alone. Quite a number of remedies in the kali group have the symptoms, irritability, quarrelsome, and lack of will power. Hahnemann speaks of the weakness in the lower extremities, particularly marked in the kali group. Farrington speaks of the extreme weakness in the lower extremities of the kali group. Weakness when walking, when eating, after menses. Backache, severe after illnesses; walking, before menses; support, suggestive trio, backache, sweat from pain and weakness. Lumbago, sciatica, menorrhagia.

Kali Carb.

Leading Indications:

- 1. Aggravation of symptoms between the hours of 1 and 5 A.M. (cough, sleeplessness, mental symptoms, etc.).
- 2. Great sensitiveness to cold air and wet, cold, restless; constantly taking cold.
- 3. Surface sensitiveness to a light touch; and sensitiveness to noises with vibrations, causing a curious feeling in the epigastrium, composed of pain and fear, abnormal ticklishness.
- 4. The nervomuscular pains are characteristically sharp, sudden, darting pains, they may persist during rest and are worse when lying on the affected side (bryonia pains are the reverse).
- 5. Aversion to being left alone, lack of will power and of courage.
- 6. Weakness, when walking (feels must lie down) when eating; after menses.
- 7. Backache severe, making patient cry out; after illness, from walking, before and during menstruation, relieved by support; backache, sweat from pain, and weakness are an indicative trio; lumbago and sciatica.

8. Cough and asthma with characteristic aggravations. These aggravations are very characteristic of this group. Ars. does not have many of the characteristic modalities which are to be found in this group. Expectoration is tough, goes back to the original type of tough, stringy expectoration, forcibly ejected, which suggests whooping cough.

Kali Chloricum. This remedy was proved by E. Martin of Germany.

Region-Blood. Nerve Sheaths, Mouth, Rectum, Kidneys.

Modalities-worse, cold; mercury.

Kali chloricum is one of the lesser members of this family but is extremely useful. Its sphere of action is the blood and the nerves, the mucous membrane of the mouth, rectum and also involves the kidneys. Its modalities are intense cold and the use of mercury. Perhaps, due to my limited experience, I have used it mainly in diseases of the mucous membranes of the mouth, stomatitis, heat and dryness of the mouth. Peeling of the lips, burning pains in the buccal cavity and also the tongue. Gums inflamed and very sensitive, much bleeding. Salivation is to be found in kali chlor. Here again there is the characteristic fetid breath. Follicular ulcers inside the lips, dorsum of tongue, suggests this remedy. Salivary glands enlarged and tender. General cachetic condition of the whole system.

Kali Hydriodicum. This remedy was introduced into the materia medica by Hartlaub and Trinks of Germany.

Region—Glands, frontal sinus; nose, eyes; lungs, upper, lower; Periostium.

Modalities-

Worse: heat, pressure, touch; night: damp changing weather, cold food, mercury.

Better: motion, cool air.

Antidoted by hepar sulph. Antidotes mercury. Compare ars. bell. con. hepar. iod. lach. merc. mez. puls. sil. sulph.

Its sphere of action is the glands, sinuses, nose and eyes, lung involvement, particularly either upper or lower lobes and periosteal inflammation. Modalities of the remedy: aggravations are heat, pressure same as the other kalis. Aggravation at night. Its time of aggravation is of longer duration than the other remedies. From damp, changing weather and cold foods. Amelioration from motion and cool air. Kali iod, has an extensive sphere of use, in the scrofulous, secondary and tertiary stages of syphilis, also chronic rheumatism. Edema of the eyelids, chronic inflammation of the throat, ulceration of mucous membrane, heat in the entire mouth, burning sensation characterizes most of the mucous membranes. Great deal of salivation accompanies the ulcerated condition of the mucous membranes of the throat. Marked fetid breath. Most of these remedies have this quite marked fetid breath and in acute conditions I hesitate to prescribe one of the kali group without this fetid breath. Vomiting, diarrhœa, heartburn and emaciation are characteristic of kali hydriodicum. Painful sneezing, lachrymation, conjunctive acrid watery discharges from the nose and eyes, with aching in the frontal sinus region. Chronic catarrh of the frontal sinus. Kali hydriodicum is indeed a very useful remedy. Dry, hacking cough, green expectoration, called soap suds. Soap suds expectoration is a point of definite differentiation between several other remedies (ant. ars, and kali nit.). One of the best antidotes for bad effects of mercury. Severe nightly bone pains with swelling.

To be continued

## THE KALI SALTS

(Continued from page 152)

FRANKLIN H. COOKINHAM, M.B.

Kali Muriaticum. This remedy is not in Allen's Encyclopedia, but is found in the Handbook.

Its region of action is the epithelium of the throat, eustachian tube and middle ear. We are getting into a little different region here, although still dealing with the mucous membrane. Its region of action includes the mucous glands, muscles and joints. Usually find kali mur. likened to kali carb. left sided. Ameliorations are somewhat similar to the bichromicum and hydriodicum. Aggravated in open air, cold and drafts, lying in bed and nightly aggravations. Most of these remedies we have shown here are aggravated by dampness. Aggravation from fats and rich foods, aggravation during menses. Kali carb. before menses. Amelioration from cold drink and rubbing, letting down hair. Kali mur. has an action of the eye, ulceration of the cornea. It is a valuable remedy to remove scarring of the cornea. I am reminded of a youngster two years ago who had a gonorrheal infection of the eye. The child was taken to the Children's Hospital at once. Cornea of infected eye was ulcerated and this was followed by a scar which extended down toward the pupil with some interference with vision. Kali mur. was given over a period of six months and practically removed the scar. Very careful examination would be necessary to detect it. Here again one finds the tough exudate, swollen glands, soreness and general aching head, sweats and symptoms which suggest in some degree members of the calcarea group. An excellent remedy for catarrhal deafness (merc. dulc.). Induration of tonsils, hawks up thick white mucous, tongue coated white, base, marked fullness after eating with aggravation following use of fats, such as is characteristic of pulsatilla. In the chest we get difficult breathing, which goes with practically all

of the kali group, bronchitis and asthma, thick expectoration which flies from the mouth during coughing (badiaga, chel, med.). Rawness in the chest. Painful breasts at menses (sil. bry. puls.).

Kali Nit. This drug was proved by Hahnemann.

Region—blood vessels; heart; kidneys; vaso motor; respiratory organs.

Worse—walking, cold, damp, taking cold.

Better-Lying with head low; gentle motion.

Kali nit. is not used as much in the homeopathic field as it is in the general practice of medicine. However, the indications that are more or less specific and those that are to be found in the homeopathic materia medica are worthy of your careful consideration.

• In the female sexual sphere, I find profuse, inky menstruation rather characteristic of this drug, as well as canth. and camph. The general sphere of action of this drug is in the chest, particularly in asthmatic conditions, where there is violent dyspnea, with extreme constriction of the chest. Like all kali salts, it has morning aggravation, the dyspnea is accompanied by stitches and burning in the chest, profuse, sour mucus expectoration, with some relief.

I desire to call your attention to three other drugs thought of in connection with asthma, accompanied by violent dyspnea. Ant. ars., which is of particular value in emphysema with excessive dyspnea and cough, which is mainly with mucus secretion.

Kali iod. previously referred to. When one has very profuse expectoration, green in color, which has been characterized by Hering as soap suds expectoration, this has a very fetid odor.

Let us now consider a new member of this family, kali permanganicum. This remedy is not used as much as formerly. It is characterized by extreme irritation of the mucous membrane of the nose, throat and larynx, ulcerative tonsils with enlarged glands. In the days before the

wide use of antitoxin in the treatment of diphtheria, in severe cases of ulceration and gangrenous odor, this remedy was particularly suited to this. These were accompanied by extreme diphtheritic toxemia as well as a nasal type of involvement and a marked fetor. Here should be considered also, merc. cyan., and kali bi.

Kali Phosphoricum. Schussler Tissue Remedies.

Region-Nerves: Brain, cord: Excretions, One side.

Worse—Slight excitement, worry, fatigue, mental, pain, cold.

Better-Sleep, eating, gentle motion.

This is one of the great nervines in homeopathic materia medica. Cases of exhaustion following illness or resulting from long continued mental strain, will yield readily to administration of kali phos. Cases of the neurasthenic type with mental and physical depression are particularly suited to this medicament.

It is understood of course, that one should make the usual physical examination, including blood count, hemoglobin estimate to determine the type of case one has in hand. Kali phos. is of splendid value in wasting muscular diseases, atrophic diseases in old persons. Here there is a marked athesnia and kali phos. helps in picking up these more or less old wrecks. The mental symptoms should be particularly noticed. There is a nervous dread of attempting things, irritability, whereas the patient was formerly calm. Night terror in children indicates this remedy. In adults and middle age, a loss of memory, asthenia, manifested by the fact that the slightest exertion exhausts; an all gone sensation in the pit of the stomach (sepia. ign. sulph.).

Gastrointestinal tract has foul odorous diarrhœa, this suggests kali phos. In the female the menses too late and too scanty, accompanied by mental depression. In both sexes a loss of sexual power.

I would like to suggest that you compare zinc, gels. cimicifuga. lach. mur. ac. Hering in one of his articles, suggests that after a weakening disease one should be given mushrooms, which contain kali phos.

Kali Sulph. The final great member of this family, is kali sulphuricum (Schussler Tissue Remedy).

Region-Epithelium, Glands, Resp. Organs, skin.

Worse-warmth, room, air, noise.

Better-cool air, walking, fasting.

Kali sulph. is to be thought of in all skin conditions accompanied by profuse desquamation, particularly so in the acute exanthema of childhood and in the late stages of inflammation. Kali sulph as well as kali mur., assist in the absorption of inflammatory deposits. The yellow mucous, serous discharge, particularly in the involvements of the upper respiratory tract, is characteristic of kali sulph. In infections of the nose and throat where there is a yellow, slimy sputum and discharge, with loss of smell (nat mur.). Coarse rales in the chest suggests tar. emet.

The post influenzal cough of childhood which is quite persistent in many instances. In asthma when the yellow discharge is present, with aggravation especially in the evening and by warmth.

Referring again to the skin disease, Psoriasis, I appreciate the difficulty one has in treating this condition, but in one instance in particular, I saw much benefit from the administration of kali sulph.

Eczema with burning, itching papular eruption accompanied by a great deal of desquamation (merc. mez.). Nettle rash, kali sulph. may be of special value, also (urt. urens.). Seborrhœa of the scalp. Tinea barbæ with much scaling, compare kali sulph. chrom. particularly in the upper respiratory infections, symptoms of which are similar to kali sulph. but more intense.

-A. I. H. Journal, Dec., 1949.