

1944

Calcium (Soluble) for Fractiousness

Harold S. Hulbert

Follow this and additional works at: <https://scholarlycommons.law.northwestern.edu/jclc>

 Part of the [Criminal Law Commons](#), [Criminology Commons](#), and the [Criminology and Criminal Justice Commons](#)

Recommended Citation

Harold S. Hulbert, Calcium (Soluble) for Fractiousness, 34 J. Crim. L. & Criminology 233 (1943-1944)

This Article is brought to you for free and open access by Northwestern University School of Law Scholarly Commons. It has been accepted for inclusion in Journal of Criminal Law and Criminology by an authorized editor of Northwestern University School of Law Scholarly Commons.

CALCIUM (SOLUBLE) FOR "FRACTIOUSNESS"

Harold S. Hulbert²

At a great inland military establishment³ near a very large city there are hundreds of court martial prisoners sent to serve terms of less than one year. The brig wards are largely grouped together, and each contains up to 80 prisoners, the more violent and disturbed prisoners being kept in cells.

Many prisoners are there for infractions of discipline. If fractious there, there is no point in resentencing them for further discipline while they are refractory.

The prison camp management is superior. A medical officer commands intelligently and progressively. His staff of line and staff officers and of non-commissioned officers—chiefs and petty officers—are sincerely determined that if they themselves can not go to sea or to the front they will reclaim for the service as many as possible of these prisoners, "salvage them," and send *them* back to duty. To a friendly visitor their attitude is beautiful.

Once while visiting the commander he discussed with me the case of a boy who "blew his top." Several officers and chiefs were in the office with us and engaged in the conversation. These old time chiefs are remarkable men, each invalided ashore for physical reasons like rheumatic heart, sequels of complicated malaria, arterial disease, etc., each in the prime of life, each experienced in the ways and needs of the fleet, and each crying his heart out that he is "beached."

The boy under discussion had been fretful for days, "off his feed," restless, irritable, sensitive, touchy, rude, quarrelsome, took great offense at trifles, and grew progressively more restless and emotional. Had he been a girl and not a prisoner an aunt would have said the child was on the verge of tears and of a temper tantrum. Being a boy he could not cry his heart out—he did not know how nor could he allow himself to do so; being a prisoner he could not be sent for long walks about Uncle Charlie's farm and on rainy days to putter about the machinery repair shop of the "smithy" there, meanwhile overfed and comforted by Aunt Clara. The storm clouds gathered: his condition worsened with sleepless nights. To be manly he did not complain but pretended to be asleep. Finally the tempest broke: he had a male temper tantrum; he was surly, insubordinate, disobedient, "on strike," fighting prisoners

¹ No. 1, War Penology Series.

² An editor of this Journal, and formerly Lieut., M.C., USNRF, Consulting Psychiatrist, Chicago.

³ Identity deleted because this is a current and not a past military episode.

and petty officers too. This tended to impair the discipline and rehabilitative efforts of the ward.

In discussion it was brought out that this was not the first offense of this prisoner, and that "blowing the top" was a prison problem still unsolved.

I said, "Two will get you five that he is immature in body, of non-athletic type, relatively hairless, thin and thin faced; X-rays would show poor calcium deposits in the bones of the skull, and blood chemistry tests would show low blood calcium." I said further, "Low blood calcium children are overly irritable; they overly react to irritation, their nervous systems are super-irritable, and hence their physiology is awry at the same time their blood calcium is especially deficient. A four and a half year old boy, found later to have low blood calcium, was annoyed by his toddling two year old sister when she kicked his electric train tracks, so he dropped her out of the window. They lived on the second floor. This illustrates reactions of over-irritability from trifling provocation."

I was asked: "What can we do? We can not X-ray all these men. We can not do the blood chemistry tests. By the way, this boy is largely as you surmised."

Reply: "Calcium conjugates firmly with phosphoric acid. There is no point in trying to get calcium into nerve cells by giving calcium phosphate compounds, although that is a useful form in rickets and for broken bones. Calcium lactate is too weak and of limited usefulness. However calcium glucose compounds are loosely conjugated and are soluble and are effective in these cases provided it is given at the proper times and time intervals."

The chiefs were very attentive, one especially.

"Because a soluble calcium salt would combine in the stomach with any food except water or orange juice, become insoluble and hence of no effect in sedating the nerves, calcium gluconate must be given when the stomach has been without food for an hour or more; and because it is slow to absorb no food may be taken for an hour or more after chewing a calcium gluconate tablet and washing it down with plenty of water or orange juice.

"If calcium were to be given daily the blood calcium value would first rise (positive phase), but subsequently it would fall (negative phase). Therefore it must be given with several days interval to boost, but not lower, the amount of calcium in the blood and consequently in the nerve cells.

"The recommended procedure is this. 1 Tablet of Calcium Gluconate at 10 A. M. Tuesday and another at 3 P. M. Tuesday; one at 10 A. M. Friday and another at 3 P. M. Friday. In severe cases 10 A. M. and 3 P. M. Tuesday and 10 A. M. Wednesday; and 10 A. M. and 3 P. M. Friday and 10 A. M. Saturday; three, not

two, doses per course. Two courses per week, 3 or 4 days apart; there is no magic about Tuesday and Friday, I simply used them to illustrate the time interval."

About four months later I visited the establishment again. One chief, having heard of my presence hunted me up and said, "Doctor, do you remember telling the commander about using calcium gluconate tablets for prisoners when they 'blew their tops?' Well, I tried it just exactly as you said. Now I don't have that trouble on my wards. They are brighter too; they are quieter and happier and work more and better. No fighting. Sometimes a boy will send for me or say as I come around, 'Chief, I'm getting jittery and I'm afraid I'll "blow my top." May I have some more of that calcium?' I give it to him, 3 doses, and every few days later 2 doses; and he doesn't blow his top. My wards are quiet and more men are learning what they need to learn to get ready to go (back) to the fleet. I think all Navy and other prisons should know about it and use it just as you told us." The other chiefs present agreed. The officers later confirmed this.

Such results could be prognosticated. Some wealthy quiet day a great university, I very hopefully predict, will conduct a large series of tests measuring the blood chemistry including blood and serum calcium content of fractious prisoners in penal institutions, city jails, and juvenile detention homes before and after calcium gluconate medication and parallel such data with reports on conduct. Until then we have the reliable estimates of the chiefs and of the prisoners who ask for calcium gluconate now lest they "blow their tops."