

1890

Oil of Cassia

Since I announced the discovery of the anti-septic properties of Oil of Cassia in February 12² 1888 its use by dentists throughout the west has become almost general and a considerable number of physicians and surgeons are using it more than any other antiseptic in their general practice. I have myself used it largely. My experiments seemed to point out this substance as peculiarly well calculated for practical use in a large range of cases, on account of the certainty of its action, its freedom comparative freedom from evil effects, the ease of its application, and its pleasant odor. The late Dr David Prince did much to promote its use among the physicians and surgeons of this region. During the course of my experiments, which were conducted in Chicago, he visited me and spent some time watching the results of a series of comparative experiments then under way. He had some Laparotomies fixed for operation ^{on} his return. He adopted the oil of Cassia as ~~the~~ antiseptic, ^{and} with such happy results that he never ceased its use

during the remainder of his life.

I have now had ~~much~~ sufficient experience with this drug in practical operations to speak confidently from the practical side both as to its good and evil effects, for I have found that the oil of cassia is not altogether an innocent substance and that certain precautions in its use are necessary even in the treatment of root canals as well as in the treatment of abscess, ulcers upon the surface of the body, and parasitic skin affections.

Dr Miller of Berlin has examined Oil of Cassia with reference to its antiseptic properties and has given us his results in two papers one of 1890 and one of May 1891 in the *Deutsches Cosmos*. The first of these was first published in the German language

and in it he placed Oil of Cassia (Zimmet-Öl) as equal in power with carbolic acid but in the article in the *Cosmos* Oil of Cloves was in some way inserted instead of oil of cassia, an error which has not, so far as I know, been corrected.

~~In the~~ Under the conditions of the series of experiments last published by ~~this~~ Dr Miller the oil of cassia makes, apparently, a bad

a bad showing. This I certainly would have predicted from the plan of the experiments, for in them he has pitted the oil against 5 percent watery solutions of bichloride of mercury and terechloride of iodine as to power of rapid penetration of decalcified ^{ivory} ~~ivory~~ partially or completely saturated with plain water limiting the duration of contact to from five to forty minutes. I do not know how a series of experiments could have been better contrived to place oil of cassia at disadvantage if that had been the intention which, presumably was not the case. From my own experiments, however, I should not expect oil of cassia to compare favorably with bichloride of mercury in experiments of the class of those last reported by Dr Miller. It is a much less violent poison than the bichloride, and especially it is so in the concentrated solution which Dr Miller used. Solutions that no surgeon would for a moment think of using upon suppurating surfaces or in abscesses. ~~It is largely for the reason~~ I have often blistered the skin with much milder solutions of this drug. It is largely for the reason that oil of cassia is milder in its action that it is better fitted for general use. It seems to me.

it is time to recognize the fact that it is not the most virulent poison that is best calculated to give good results in practice.

Returning now to the practical use of oil of cassia I may report a few cases, in general practice

Case 1st A lady 65 years old very deaf and not in good health, rather anaemic and weak physically was bitten in the hand by a dog. The canine teeth of the animal closed through the pollicis muscle (the great muscle of the palmar side of the thumb) and drove their way out making a very ugly lacerated wound. I placed a little oil of cassia in a bowl of ordinary hydrant water (Our hydrant water is Artesian), to which enough boiling water was added to make it blood warm, and broke it up into an emulsion by the syringe. With this I carefully syringed out the entire wound carefully getting into all of its interstices and occupying some fifteen minutes in the washing. Then the sheels of the muscle and skin were placed together in as good position as possible and covered in with strips of Court plaster moistened in the same cassia emulsion. These were placed one over another and extended about

hand until the wound was thickly covered and well protected. A bandage was then applied and the hand tied up to the chest in a comfortable position, ~~and~~ The patient was told to keep it so and report in ten days, or if she had pain, or saw any moisture escaping anywhere or found the bandage stained to report at once. The patient reported ~~in~~ first ~~the~~ fourteen days afterward she had taken off the bandage and the complaster had been tried away except - the part just over the wound. The patient explained that she had loosened it up washing dishes. She had had no pain, no soreness and did not see why she should not use it, - for certainly it felt well enough.

The remaining plaster was dissolved off with warm water and the wound found created yet

Case 2. A patient six years old, ^{female} with suppuration of the hip joint of two and a half years duration was brought into the Sanatorium and placed under the care of my son Dr C E Black. The little girl was very anaemic, temperature 102, and pus was flowing from five sinuses from the joint discharging in the groin, about the velva on the back of the thigh and on the front some

discharging about the junction of the middle and lower third of the thigh. The sores were very offensive and much excoriation of the skin had occurred about the openings. The case seemed hopeless.

The first effort was to remove the repulsive character of the discharge. This was accomplished within a few days by syringing with Cassia water and the temperature came down to 99° . An exploration was then made under an anaesthetic to discover the extent of the mischief. The conditions were found so grave that nothing was done further than the insertion of some tubes to facilitate drainage and washing. An effort was made to limit the suppuration and heal ~~the~~ some of the sinuses and abrasions of surface. The suppuration was almost wholly controlled within ten days by the use of cassia but there was absolutely no reparative process. Then at my suggestion Bichloride of Mercury 1 to 1000 was substituted. This was used for ten days. Still there was no repair and the pus discharge had much increased, the temperature again went up to 102 . Salicylic acid and carbolic acid were separately tried but their inferiority was so manifest that

the cassia was again ~~used~~ resorted to. The pus was again markedly limited in quantity and the disagreeable odor that had arisen during the use of the other drugs rapidly passed away.

About this time, six weeks from her admission, the patient was attacked with meningitis from which she died.

^{aged 19}
3rd Case, Miss M, came under my care in Oct-1890 with a large osseous tumor of the lower jaw in the region of the bicuspid and first and second molars. The tumor was not painful but the girl anaemic ~~and~~ poor in flesh and much discouraged on account of the condition of her mouth and face. The size of the tumor was causing considerable disfiguration and seriously interfering with the motions of the tongue. The tumor proper was removed but enough bone was retained for the purpose of retaining the form of the jaw with some allowance for loss by necrosis afterward for the piece left was necessarily central with bone removed from three sides from the first bicuspid to the third molar. Oil of cassia, emulsion in water, was used to wash the wound four times per day, and this was the only treatment. At the end of two weeks the patient

was so well that she wished to go home, and did go against my wishes. There had not been a drop of pus, the wound was almost closed but the tissues folded in in such a way as to form a deep pocket in the bottom of which there was a bit of bone not covered.

She was put in charge of her family physician who was instructed as to what the treatment had been. Two weeks later she returned to the sanatorium with her face frightfully swollen and a temperature of 102. I found pus had formed and had burrowed through the remaining bone, to adjacent portions and in various directions through the soft tissues and was then threatening to discharge on the face in two places, one opposite the wisdom tooth and one near the cuspids.

I at once opened up the principal part of the old wound and found the way into the sinuses and syringed them out with an emulsion of cassia. The temperature fell to 99 within twenty four hours and the swelling disappeared almost entirely within three days. Quite a little bone was removed in hunting out the sinuses and shortly afterwards pieces of necrosed bone loosened and were removed to such an amount that the strength of the support

had much resemblance to ~~Ec~~ eczema

The face was first washed with soap and warm water to remove crusts and pus and serum and put the skin in the best condition for absorption. It was then washed with an emulsion of oil of cassia keeping it wet with such friction as the patient could endure for about fifteen minutes. It was then dried and covered lightly with vasaline.

This was repeated once each day. Within three days the case was so much improved that he expressed himself as feeling very comfortable. At the end of ten days he was discharged well, except half dozen fresh pimples that had been overlooked low down on the back of the neck. I gave the patient a little vial of oil of cassia and told him to touch these and any other spots that might appear with the pure oil. Three days afterward he returned saying the back of his neck had become very sore again. Upon examination I found a Cassia blister extending half way round his neck. This Blister has special characters, and more closely resembles an acute ^{form} eczema than any thing else I have seen. It is not very painful but it is liable to discharge an enormous amount of clear serum.

Of course the cassia was stopped, and within a few days the case was well.

In this case many of the loosened hairs were removed by the friction of the towel and by pulling out from day to day, but not in such numbers as to seriously injure the beard.

In this disease the vegetable growth causing the disease enters the hair follicles and grows into the glands of the hairs as well as into the epithelium of the surface of the skin. Hence the penetrating power of the antiseptic is the important feature in its treatment. It is safe to say that no coagulant will answer the purpose. Certainly I have had no such results with carbolic acid or Bichloride of mercury as with the oil of cassia. A number of cases of Cycosis have fallen into my hands and in each case the oil of cassia has effected a cure promptly.

Alveolus. The socket or cavity in the
process ^{of the} maxillary bones in which the roots
of a tooth are lodged.

Alveolar process. The bony process, or projection
from the maxillary bones in which
~~the roots of the teeth~~ covering the
roots of the teeth and forming
their sockets, or alveoli.