

PREVENTION OF GASTRIC DISTURBANCE BY SODIUM CARBONATE, IODIDS, OIL OF SANDALWOOD AND SIMILAR DRUGS.

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For a number of years we have been working to discover some method of obviating the gastric disturbance which is produced by remedies such as potassium iodid, oil of sandalwood, sodium salicylate, sodium carbonate, etc. This we have finally and satisfactorily accomplished. Remedies, such as oil of sandalwood, creosote and oleoresins administered in soft gelatin capsules may be prevented from disturbing the stomach by the process of hardening with formaldehyde the capsules in which they are placed.

Only slight hardening is necessary, especially if the capsules are kept for some time, as additional hardening comes with age. At first we immersed the filled capsules for one minute in a dilution of 1 part 40 percent formaldehyde solution to from 40 to 60 parts of water. The strength should vary with the aging allowed.

From the time that the dilution mentioned is used two weeks should be allowed to intervene before administering the capsules. A more satisfactory method of preparing the capsules is to place them in open boxes in a closed vessel in which they are subjected to the vapor of the solution of liquor formaldehydi. About 15 cc. of the solution should be used for each cubic foot of space in the closed vessel. The solution should be placed on cotton or gauze in a saucer or tray. The time required for hardening the capsules varies with the temperature and with the time that is to be allowed before they are administered. Six hours' exposure or less is enough for capsules which are not to be administered at once, while twelve hours may be necessary in preparing capsules for immediate use. These estimates are made for ordinary soft gelatin capsules at the ordinary room temperature, from 70 to 75° F. The capsules become hardened so that they are not digested by the gastric juice, but are digested by the intestinal secretion, if they have not been subjected too much to the vapor, in which case they may pass undigested. If dilatation of the stomach is present and the capsules or food do not pass into the intestines within the usual time, a greater degree of hardening of the capsules may be necessary. For the ordinary normal person capsules prepared as previously described will prevent gastric disturbances by carrying the medicament into the intestines before the capsules burst.

An even more satisfactory method of carrying through the stomach such remedies as sodium carbonate, potassium iodid, sodium salicylate, etc., is obtained by combining the desired remedy with mutton-suet and paraffin. When incorporated in such a mass the medicament is uniformly carried into the intestines without dissolving, as the stomach does not secrete a fat digestant. The suet is digested as it passes down the intestines and thus

gradually the drug embodied in it is liberated. The paraffin is added to give additional hardness. The following combination is recommended:

	gm. or cc.	
℞ Sodii carbonatis monohydrati.....	90	℥ iii
Potassii iodidi.....	90	℥ iii
Sodii salicylatis.....	90	℥ iii
Sevi	30	℥ i
Paraffini	16	℥ iv
M. et fiat mass.		

All the ingredients should be melted over water and while melted encapsulated in 00 gelatin capsules. The capsules may be filled with a fruit spoon. The melted mixture should be of a creamy consistency, and the salt used should be previously powdered. The encapsulated product is a mass of the salt, the suet and the paraffin, is hard and remains unaffected by the gastric juice.

In the use of sodium carbonate, in the treatment of Bright's disease, as suggested by Martin H. Fischer, we have found this method of administration of decided value, as formerly it was quite difficult for the patient to take alkali in sufficient amounts to render the urine neutral or alkaline without producing gastric disturbance, with coated tongue and other symptoms.

The manner in which albuminuria and casts have disappeared under this treatment has been quite remarkable. A number of patients who had been declined as risks by insurance companies because of albuminuria and casts have been passed by the insurance examiners after a few months of alkaline treatment. In order to secure the desired result we have added $\frac{1}{4}$ grain of phenolsulphonephthalein to each capsule of the monohydrated sodium carbonate preparation and have advised the patients to take from five to eight capsules daily as indicated to keep the urine light pink. This method constantly assists in regulating the amount of alkali to individual and varying requirements. The patients do not object to the use of the monohydrated sodium carbonate when so administered and can continue it over a prolonged period, when necessary. Potassium iodid so administered does not disturb the stomach, but produces its other physiologic and therapeutic effects.

In the use of remedies such as pancreatin, which it is desirable to liberate at once in the intestines and not to have dissolve slowly, ordinary gelatin capsules should be subjected to the formaldehyde vapor as suggested for the soft gelatin capsules. These capsules do not digest in the stomach and therefore carry the remedy they contain through without its being acted on by the gastric secretion. The remedies which we suggest to be incorporated in the suet and paraffin cannot well be given in ordinary gelatin capsules, as they may cause intestinal disturbance by liberating the entire amount of monohydrated sodium carbonate or potassium iodid at one point in the intestine instead of gradually freeing the mass as they pass down the tract.

We advise that in preparing the capsules controls of methylene blue and oil of sandalwood be used in test capsules. If the capsules have been insufficiently hardened a glass of carbonated water taken two hours after the

capsule has been administered will show by the eructation whether or not the capsule has broken in the stomach. If the capsules are subjected to formaldehyde vapor too long or if the gas be too strong the urine may be slow in becoming blue, or may remain unchanged. Capsules intended for immediate use may be subjected to considerably more formaldehyde than may be used on those which are to be kept for a few months.—*Journal A. M. A.*, Vol. 62, p. 197.

THE ART OF ADVERTISEMENT WRITING.*

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Advertising is a branch of the art of business, but advertisement writing is a branch of the art of literature. If we could question the men who are writing the best of the advertisements we see in the daily press I am sure we should find that the majority of them have passed to that work from the ranks of journalism, not from business. But the ability to write anything well consists principally of natural aptitude. Training is of less importance and is useless without the first qualification. The saying, "Poets are born, not made," is almost equally true of other writers. This sounds as though the chemist could not hope to write effective advertisements for himself. I do not think that is so. In the first place, it is impossible to write upon any subject without knowing something about it, and pharmacy is a difficult subject for an outsider to master. Secondly, the services of the really good men in the advertising business are not available for small retail shopkeepers in our business or any other. They are nearly all employed by the big agents and engaged upon the work of advertisers who are spending many thousands a year. I have seen the work of some of the self-styled experts, who offer their services to the drug trade, and I am convinced that the average chemist could produce better copy than anything I have seen from them.

Good Writing. I propose first to consider some of the ideals of good writing in general, and then to discuss their application to advertisement writing. You must remember that in writing you are setting the reader a task—to grasp, put together, and consider the thought you are expressing. You can make that task easy or difficult. Just take up in imagination a good but difficult novel of the Victorian period, and a bad but popular one published last year. You may find the former tires you if you are not very eager to read it, while the latter you can go on reading in spite of a gradually developing contempt. The reason is that the newer novel possesses the quality known as "readableness." You will see at once that this quality is absolutely essential in advertisement writing. The man who is reading a novel or a text-book may tolerate a style lacking this merit, because he hopes to enjoy or profit by his reading. But if he is reading an advertisement he has no particular desire to go on; he has only begun because

* Read before the North London Pharmacists' Association.