

these children. The only case Dr. Garrison has seen which resembled it was a 5-years-old child whom she was called to see. A consultation had been held and the child was to be operated on for tubercular peritonitis. Dr. Garrison found the child completely paralyzed except in the left hand. She objected to the operation, for she saw no signs of tubercular peritonitis, and asked the physician to examine for tubercular organisms in the sputum and a few bacillus were found. The child, three months afterward, visited Dr. Garrison and remained for three weeks. When she came she was able to creep around. By judicious manipulation the development of the atrophied muscles was aided and the child is now apparently in perfect health and has since been able to enter school.

DR. A. W. FAIRBANKS said that the movements noted were not those of *tic convulsif*. The athetoid movements did occur, but so rarely that he did not include them in his summary of the signs. He is inclined to think that they were not athetoid movements, but rather choreic movements of slow character, simulating athetoid movements. There was extreme atrophy and degeneration of the peripheral nerves. Dr. Fairbanks thinks that there is no ground for the assumption that tuberculous is an etiologic or pathologic factor. Tubercular processes are sometimes terminal factors of the disease, but do not form an integral part. He should not consider that the case mentioned by Dr. Garrison belongs to this class of disease because of its marked improvement. Instances do occur in which the disease does not progress for a time, but sooner or later it progresses and the patient dies. He believes that the more these cases are studied the more it will be found that they originate in childhood. The very slowly progressive symptoms in the early stages are overlooked by the parents.

COLLODION AS A DRESSING AFTER INTRANASAL OPERATIONS.

A PREVENTIVE OF POST-OPERATIVE HEMORRHAGES.*

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Since the publication of my first paper on this subject,¹ some improvements have been made in my method of using collodion as a dressing after intranasal operations. These were partly evolved from my own experience and partly from the suggestions of my colleagues.

Dr. E. Rixford of San Francisco suggested the use of compound tincture of benzoin as a substitute for collodion. I found it very reliable as a preparation of the wound for collodion; it dries the tissue nicely, so that the collodion sticks to it much better.

Dr. James F. Smith of San Francisco uses pieces of gauze instead of wisps of cotton. I have followed his suggestion.

Dr. C. W. Richardson,² Washington, D. C., applies the collodion with a probe; I had tried that before I selected my present method, but discarded it.

That the usual after-treatment is not satisfactory to many was well expressed lately at two European congresses where this question was discussed.

I therefore take the liberty to describe my method. After intranasal operations, we must choose between packing the nose or risking a postoperative hemorrhage. A reliable, firm packing of the nostril causes great discomfort and often a sleepless night, while the collodion dressing allows the patient to breathe even through the nostril operated on, but covers the wound against infection from the air and prevents secondary hemorrhages.

I have now used this dressing in 243 cases with perfect results in 233 cases. I had to replace the collodion dressing after a few hours in 4 cases. In 3 of these the hemorrhage occurred on the posterior end, in 1 case of polypoid degeneration of the erectile tissue in the anterior half. In 6 cases, or less than 3 per cent., the collodion dressing was not sufficient and had to be replaced by packing. The hemorrhages occurred in 5 cases from the posterior end of the lower turbinal. One of these five patients was a bleeder, with hypertrophy of the left ventricle, high blood pressure and traces of albumin in the urine, indicating the beginning of a shrinking kidney. The sixth case was a fibrous polypus from above the posterior end of the lower turbinal on a place on which I could not properly apply the collodion dressing.

I am aware that this method is far from perfect, but I hope that if some members of this Section take the matter up and try to improve on it they will perfect it to such a degree that there will be no more postoperative hemorrhages.

TECHNIC.

After I have finished the operation and stopped the bleeding with adrenalin, I clean the field carefully, wipe over the wound and surrounding tissue compound tincture of benzoin on a cotton carrier, then cover the wound with a piece of sterilized gauze (about 1 by 2 cm.). I am particularly careful to press this around the posterior end, as from that point hemorrhages occur most frequently. These pieces of gauze I keep on hand compressed, so that they are stiffer and can be more easily introduced. I drop the collodion slowly on this gauze, beginning on the posterior end, while my assistant blows hot or cold compressed air into the nostril to quicken evaporation. The collodion and gauze form a white, firm membrane, which fulfills two purposes: it protects the wound against infection from the air, and prevents secondary hemorrhage. As an extra precaution, I instruct the patient to keep a little cotton in the entrance of the nose on the way home. This absorbs the little oozing of blood and serum which exists even when the nose is packed. The cotton may be changed as often as it is soaked; but the patient may take it out at home so that he can breathe through that nostril. This dressing I leave in the nose from four to six days; if left longer the edges become loose and too much discharge is kept back.

In order to remove the dressing, I cocaineize the nose and apply some peroxid of hydrogen, which helps to loosen the dressing, which I then take out with a pair of pincers; frequently a few drops of blood follow this procedure.

For dropping the collodion on the wound an ordinary eye dropper will not do. The collodion would flow too quickly. It must be dropped on the wound slowly and carefully, so that it does not run down into the pharynx, an accident which would make the patient gag and cough. One might use a fine Eustachian catheter, on the wider end of which a small rubber bulb is mounted, fastened airtight with a rubber band. One filling of the tube with collodion is usually enough to cover the whole wound. I use a small metal tube 9 cm long, 1 mm. thick, with a tulip tip on one end, to fasten the rubber bulb. This tube must be cleaned out thoroughly after use.

DISCUSSION.

DR. OTTO T. FREER, Chicago, regards dismissing patients after intranasal operations without tamponing as permissible after operations on the middle turbinated body, but a dan-

* Read in the Section on Laryngology and Otology of the American Medical Association, at the Fifty-sixth Annual Session, July, 1905.

1. Arch. of Otol., vol. xxxi, No. 5, 1902.

2. The Laryngoscope, vol. xiv, No. 9, 1904.

gerous practice to follow after resections of the lower turbinate or operations on the septum. A false security is created by the long duration of the bloodlessness about the wound due to cocaine and adrenalin, so that even a good-sized artery will not bleed. After some hours, however, relaxation of the vessel with dangerous bleeding is very apt to occur, and to last a long time before the surgeon can reach his patient. Dr. Pischel's method may be a good substitute for the tampon though Dr. Freer has had no experience with it, but to let the patient go without any precaution against delayed hemorrhage is a mistake. Dr. Freer said that he knows of a case in the practice of a colleague in which the patient bled to death in spite of packing, and of a hemorrhage in the practice of another physician in which the patient became almost exsanguinated before relief came. It is therefore not safe, he said, to send the patient home unpacked. The physician can not be sure that he will observe instructions and will not sneeze and blow the nose. Dr. Freer has seen a violent delayed hemorrhage follow the use of the galvano-cautery.

DR. HAL FOSTER, Kansas City, Mo., said that if physicians err at all they would better err on the side of safety and use some packing in the nose. There may be many cases without hemorrhage, but they are likely to have an unpleasant experience at any time. He would feel safer with a packing in the nose.

DR. ROBERT C. MYLES, New York, said that the history of nasal operations resembles in some respects the work on the throat. Mackenzie did more operations without a death than probably any other man, and he had no hemorrhage. Dr. Myles has had several hemorrhages that were very distressing. He adopted the practice of putting nothing in the nose and got along very nicely until he would have a hemorrhage in the midst of a busy day, and then he would begin packing all of that class of cases. It is often advisable, he said, to remove large pulpaceous masses of tissue from the anterior turbinate when these cause distress in sleeping and breathing or in the ear. The removal with snare, scissors or trephine, of the redundant tissue of the turbinate and the periosteum gives often permanent freedom, but hemorrhage frequently occurs. No doubt there are many evil consequences from packing and from the pressure. If patients could be controlled it would be better not to pack. Physicians pack in many cases in which, possibly, it is not needed, because of the danger of hemorrhage. When called to these cases of hemorrhage there is usually a great loss of blood before the physician arrives.

DR. KASPAR PISCHEL, San Francisco, declared that just such experiences as Dr. Richards has described compelled him to use packing before 1901. In his own nose the packing was so disagreeable that he began to look for something else. He covers the whole wound with collodion. The same method is used after operations on the middle turbinate and on the septum.

LESSONS TO BE LEARNED FROM THE PRESENT OUTBREAK OF YELLOW FEVER IN LOUISIANA.*

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The present seems to be a suitable occasion to invite attention to several points in connection with the epidemic occurrence of yellow fever in the United States at the present as well as at other times. In the discussion of the symposium on yellow fever at the meeting of the American Public Health Association in Washington in 1903, I called attention¹ to the necessity during the epidemic season for requiring physicians, in cities where yellow fever is prevailing or likely to prevail, to report promptly to the authorities all cases of

fever of any kind coming to their notice. This is necessary in order that there may be no delay in the institution of proper measures to protect the community against extension of the disease if it be yellow fever, for this extension will almost surely take place in the more southern latitudes if the patients are not protected from mosquitoes at the outset. If all cases of undetermined fever were promptly reported and at once protected from mosquitoes² it would hardly be possible for the disease to spread if it were yellow fever; on the other hand, where the physician waits for the appearance of black vomit, the golden opportunity passes by, for it has been shown that in practically all cases the disease can not be communicated after the fourth day of the fever. For this reason the diagnosis should be anticipated, and all febrile patients should be immediately protected from mosquitoes until it is shown by actual demonstration that they are not suffering from this disease. Epidemics do not follow every introduction of yellow fever; mosquitoes becoming infected may die before they bite a non-immune, or the patients may happen to be treated in a locality free from *Stegomyia*. A group of cases of yellow fever occurring without black vomit usually receives the designation bilious remittent fever, a diagnosis that should be erased from our text-books. Bilious remittent fever, acute in type and of short duration, appearing in the United States, is yellow fever, and it should be so regarded. Bilious remittent fever was formerly regarded as a type of malarial remittent, but that was before the use of the microscope was found to be necessary for a positive diagnosis of malarial infection. We know now that malarial fever is not a disease of cities, but of outlying districts, while the bilious remittent fever, so called, has been recorded in the cities, in epidemic form, and in such intimate association with yellow fever that by some, the diseases were declared identical, and by others the latter was said to be only a modification of the former. Most interesting and important in this connection is the statement cited by La Roche,³ in his chapter on bilious remittent fever, that "the morbid appearances revealed on dissection are the same in remittent as in yellow fevers." This statement, however, was not wholly accepted by him, for he calls attention to the bronzed appearance of the liver in certain remittents, a condition that we know results only from malarial pigmentation. Now that we can so easily differentiate malarial remittent and typhoid from yellow fever, the diagnosis is much less difficult, except where yellow fever occurs as a complicating infection.

Our confrères in Havana have demonstrated to us that it is possible to prevent the epidemic occurrence of yellow fever, while occasionally admitting cases of the disease into the heart of a city in which the climatic and other conditions are known to be most favorable for its extension in epidemic form, and in which there are more susceptible persons now than ever before. The method suggested here is in many respects similar to, and is based on, the one adopted during the American occupation of Havana.

Since then it has been sufficiently demonstrated, in 1903 and again in 1905, that under the lax system heretofore and now in vogue, yellow fever can easily secure a firm foothold in certain of the southern states and escape recognition until it has passed almost completely

* Read at the Thirty-first annual meeting of the American Public Health Association at Boston, September 25-29, 1905.

1. Report of the Proceedings of the American Public Health Association, vol. xxix, p. 291.

2. Since this paper was read, I have been informed by Dr. E. Liceaga, president of the Superior Board of Health of Mexico, that the line of procedure indicated is now being followed in his country.

3. Yellow Fever, La Roche, Philadelphia, 1855, vol. 1, p. 590.