THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.]

THURSDAY, AUGUST 4, 1870.

[VOL. VI.—No. 5.]

Original Communications.

CASE OF POISONING BY WORM LOZENGES.

By BENJ. D. GIFFORD, A.M., M.D., Gloucester.

ON Dec. 23d, 1869, I was called to a child, three years old, who, two hours previously, had eaten seven "worm lozenges," judged to contain santonin as the medicinal ingredient. I found her in clonic spasms of the left side; pupils widely dilated and uninfluenced by light; respiration, much impeded, eighteen per minute; a viscid, frothy mucus issuing from the mouth at each expiration. The spasms involved every muscle on the left side of the body. The face was twitched into frightful contortions, and pleurothotonos was developed every other second. Pulse fair, 160 per minute. No ability to speak or move. She had vomited freely before I saw her. I endeavored to produce emesis with ext. ipecac. fl. and by tickling the fauces with a feather, without avail. I then gave her chloroform gtts. v. every fifteen minutes; also injections of diluted whiskey. In course of an hour the spasms began to yield and the pupils to respond to light; at the end of two hours she was perfectly quiet. I directed the chloroform to be continued should the spasms return, and left. An hour afterwards they did return, and I was again called. I found her worse than ever. Instead of the muscles of one side, both were involved in the spasmodic action. The pulse was so fast and fluttering that I could not count it. Respiration was very laborious, with mucous râles throughout both lungs. I continued the chloroform, with an addition of tinct. opii gtts. v., every twenty minutes; also small injections of whiskey. At the end of an hour and a half the spasms entirely abated, and the patient slept from 8.30 to 11, P.M.; she then awoke conscious, drank some beef-tea, then slept till morning, when she was apparently as well as usual.

A similar case is reported in the *Annale de Thérapeutique* for 1852 (see U. S. Dis-
VOL. VI.—No. 5

pensatory, eleventh edition, article Santonin), after what was considered an overdose of santonin, but which was afterwards proved to be strychnia. The symptoms were the same in my case, though instead of cold sweats the body was preternaturally hot and bathed in perspiration. I never suspected strychnia at the time, nor till I had seen the later edition of the Dispensatory. I then subjected one of the lozenges to analysis, by powdering it on a clean porcelain surface, drenching it with sulphuric acid and adding a small crystal of bichromate of potassa. After a few minutes the characteristic purple or violet color was produced, showing the presence of strychnia. The color was of precisely the same shade, though less distinct, as that produced by the same experiment with a specimen of Rosengarten & Sons' strychnia. Hence I conclude that the case was in reality one of an overdose of strychnia, and that the santonin played no part in producing the symptoms. I suppose the admixture of strychnia with santonin is purely fortuitous; but it behooves the manufacturers to carefully test their santonin before sending it out, for in this case it was far from being "positively safe."

PSEUDO-MENINGITIS.

Extracts from an Article by M. BOUCHUT in the *Union Médicale*. Translated by LUTHER PARKS, M.D., Boston.

Pseudo-Meningitis as a Prodroma of Acute Diseases (Tonsillitis, Pneumonia, Variola, Measles, Scarlatina).

This form of the affection is very common, and often gives rise to grave errors of diagnosis. It is more frequent at the outset of angina tonsillaris than in the beginning of any other disease. It is met with only in children of a certain age—that of early infancy. I have never seen it in those older than seven years.

Pseudo-meningitis tonsillaris is the result of acute inflammation of the tonsils, and not of diphtheritic or other different phlegmasiæ of these glands. It is the conse-
[WHOLE No. 2218.]

quence of a vaso-motor congestive hyposthenia of the meninges, inducing hyperæmia of these membranes, and produced by irritation of the extremities of the great sympathetic and of the glosso-pharyngeal nerve. The action is immediate—instantaneous. It is the initial phenomenon of angina tonsillaris, just as among the prodromata of variola there appears, under the influence of reflex action, a *rash*, or preliminary exanthem, more or less immediately preceding the pustular eruption of the disease.

The children are seized with fever, with headache, and with congestion of the face, accompanied with increased heat in that part. The phenomena are analogous to those observed in all acute diseases of the adult: only in childhood, which is the period of violent bodily sympathies, the cerebral congestion is more marked; and, together with burning cheeks and the *facies vultuosus*, there is an indescribable agitation, constant movement, cries, delirium, fright, and hallucinations which greatly terrify the mothers. At the same time there is frequency of the pulse, which is sometimes irregular and intermittent, the vomiting of indigestion, now and then constipation; in a word, everything to deceive the medical attendant for the time, and lead his judgment astray. Mistakes of this kind are not [usually] of long duration, but they [may] last a day or two, and that is too long. The diagnosis should be formed from the first hour, in order that it may be followed by action, since so acute an affection cannot be met by expectant treatment; and the physician, under these circumstances, often thinks he has to deal with brain fever—that is to say, meningitis. He thus decides, and proceeds to treatment with leeches to the ears, to the anus or the ankle; and three days afterwards, the cerebral symptoms having subsided, he thinks he has cured meningitis. I know many of the profession who, in good faith, assume to have thus cured that disease, although it did not exist, pseudo-meningitis having been mistaken for it. On one occasion, indeed, twenty years ago, a physician, now deceased, was called to a two-year old patient of mine during my absence, and applied leeches to the ears, thinking that he was treating meningeal inflammation, when there was only a tonsillitis setting in. Nevertheless, I had declared the same morning that there was no cerebral inflammation. What happened? The leech-bites bled beyond all account, the hæmorrhage could not be stopped, and the child died. Twenty times since then I have seen symp-

toms of the same kind; that is, acute cerebral disturbance, the sympathetic result of the same cause. I have been myself deceived, like many others, as I have mentioned in my clinical lectures and in the article entitled *Amygdalite* in my Treatise on Diseases of Children.

The sympathetic functional disturbance, which we call tonsillary pseudo-meningitis, attains its highest degree of intensity very rapidly; for, in a few hours all its symptoms are fully developed and do not then go on increasing. The tonsillitis once established, the congestive action in the head ceases, and the local lesion runs its course without other sympathetic symptom than the fever. This form of pseudo-meningitis lasts hardly forty-eight hours. The rapid cessation of the symptoms leads the physician to believe that he has mastered them; and if he have not discovered the angina, which is generally not very obvious in early infancy, he thinks himself to have triumphed over incipient meningitis. But, nature left to herself, or aided by a few revulsives to the limbs, would have done as well without his further interference. Never does tonsillary pseudo-meningitis go beyond the symptoms I have indicated, and it is not fatal.

Is the diagnosis very difficult? No! It is enough to be aware of the possibility of error to avoid it. In young children, indeed, acute tonsillitis is never accompanied by that dread of swallowing, or that dysphagia revealed by an act of painful deglutition, as in the adult; so that, if we wait till the child notifies us of his sore throat, or manifests it by extending his neck when he goes to swallow the saliva, we shall necessarily be deceived. The physician, therefore, who is called to a young child that has fever attended with agitation and delirium, should examine the fauces. He will, by so doing, often find there the point of departure of the febrile reaction; and if he is acquainted with the sympathetic and reflex relation of the nerves of the cervical region, he will not hesitate to attribute to the angina the production of the symptoms which may have disquieted him.

Under the head of *pseudo-meningitis as a prodroma of pneumonia*, Bouchut relates this anecdote. I was called by Dr. L. to see a child, which had vomiting, two days' constipation, very violent cephalalgia, delirium and fever, with great agitation. The little patient had been purged, so that there were no means of ascertaining the sympathetic condition of the intestine. In brief, the physician said here is meningitis. The

child scarcely coughed and had no dyspnoea. Yet, wishing to make a thorough examination, I set to auscultating, and discovered fibrinous pneumonia at the summit of the right lung. This was the cause of the symptoms which simulated meningitis.

When, in *adults*, *pneumonia* or *variola* is ushered in by sympathetic phenomena, there is no similarity in the symptoms to meningitis; but the resemblance is to insanity. The symptoms sometimes constitute a veritable attack of acute, furious mania, with cries and violence; especially if the patients have been using alcoholic liquor to excess.

In *scarlatina* and *measles* the pseudomeningitis disappears as the eruption comes out.

Selected Papers.

A MEDICO-LEGAL STUDY OF HANGING.

By AMBROISE TARDIEU, Professor of Legal Medicine in the Faculté de Médecine, Paris.

SUICIDE furnishes almost all the examples of this mode of death. Suicide by hanging is most common in prisons, in insane asylums, and similar places, where circumstances prove that homicide could not have taken place.

Signs of Hanging.—These may be divided into the symptoms observed up to the time of death, and the condition of the body as observed after death.

The material for the first series of facts has been derived from experiments made upon animals, both by Dr. Faure and the author; from the statements of resuscitated persons; from the observations of Fleischman (of Erlangen), who experimented in hanging himself; and from the great collection of cases and drawings made by Dr. Jacquemin, chief physician to the prison Mazas.

At the moment when the body, suspended by the cord, is abandoned to its own weight, a great heat is felt in the head; tremendous noises, and as it were a deafening music, ring in the ears; flashes shoot before the eyes; the legs seem to have acquired an extraordinary weight, and then all sensation is lost. Sometimes consciousness is lost from the very first moment, owing to the occurrence of syncope; a number of resuscitated persons have stated this in the most positive manner, and the author believes it to be more frequently

the case than is generally supposed. For the popular opinion that a voluptuous sensation is felt during the first moments, the author finds no authority whatever. Certain persons, however, who have been resuscitated, have described the vague languor which precedes syncope, mistaking it for sexual sensation.

The second, or unconscious phase, is marked by convulsions of the face, and then of all the limbs, particularly the legs. This phenomenon was always present in the experiments made upon animals. In the "prison Cellulaire" several of the convicts attempted to suspend themselves from the upper part of the doors of their cells, but their involuntary convulsive kicks against these doors brought immediate succor (which they would rather have done without). The knowledge of this fact spread among the convicts, and those who wished to die undisturbed took the precaution, before hanging, of placing their mattresses so as to prevent their heels from kicking the door. This convulsive period is scarcely ever absent.

Apparent death ensues. It is during this period that relaxation of the sphincters occurs. But the latter occurrence is confined to *a few cases only*; in the very complete and scrupulous observations made by Jacquemin, the passage of a certain quantity of urine and fæces is noted in but two out of forty-one cases.

Death generally comes soon. The author entirely discredits the theory of Ollivier, of Angers, that it comes sooner when the cord is placed above the larynx. The animals made the subject of experiment die in from twelve to twenty minutes, very seldom before that period (Faure). In man, there is every reason to think that death usually occurs sooner. A prisoner, named Meignant, at Mazas, hung himself from the bars of the *promenoir*; he had been taken thither at half-past ten, and at forty minutes past ten (the dates are very exact) the custodian of the court-yard found him hanging dead. In another case, a woman was resuscitated after hanging seven minutes. A. Taylor considers this possible, in general, after the lapse of five minutes. Fleischmann perceived the symptoms of stupor, noise in the ears, and sensation of weight, at the end of two minutes in one experiment, and of half a minute in another; but the application of the cord upon the trachea provoked them immediately. In most cases, and under ordinary conditions, we are entitled to infer that death takes place in about ten minutes. Ac-