

but only by abdominal section can a positive differential diagnosis be made as regards malignant tumors or enlargements of the uterine appendages. And, in fact, the combination of these last named diseases with appendicitis not seldom occurs.

Where there is good reason to suppose the existence of an inflamed appendix, and yet where, from unusual thickness or rigidity of the abdominal walls, its presence cannot be determined, some aid may be got from examining the belly under full anaesthesia. Still more help can be got by incising the muscular wall down to, but not through, the peritoneum. This procedure is commended to those who, not daring to open the abdominal cavity during the lifetime of their patients, retain for their own comfort the benefit of the doubt, instead of giving it, as they should do, to their patients.

In addition to these means of palpation we can employ the rectal touch, and in females the vaginal touch. Except in the rather rare instances where the appendix points directly downwards, little or no help is thus to be gained. In the diagnosis of perityphlitic abscess there is, of course, much more chance of gaining information by these routes. And indeed, after the abdominal walls are made rigid by a general peritonitis, that is often the only way of gaining information as to its cause. But let it be kept in mind that we are now considering the diagnosis of appendicitis, and not that of its sequelæ.

In order to emphasize the symptoms and signs by which this diagnosis can be made I offer the following summary.

Appendicitis begins with general pain in the abdomen, which afterwards becomes localized in the right side. This pain is constant; but is increased at times spontaneously, and always increased by palpation of the appendix and by motions of the body which disturb its relation with adjacent surfaces. It often shoots along the course of the ureter. It is generally intense. It is generally accompanied by tenesmus of the bladder and rectum and by nausea and vomiting.

There is always fever. This may be slight, but it steadily rises as the inflammation progresses until the complication of peritonitis subvenes. The inflamed appendix being larger and harder, and often full of concretions, at the beginning of the attack can be palpated. It is exquisitely tender to pressure. There is usually slight dulness on percussion directly over it.

Besides the diseases already mentioned, as simulated by appendicitis, in making the diagnosis there must also be excluded typhoid fever, perinephritic abscess, and all affections of the gall bladder and bile ducts.

It is within neither the scope of this paper nor the writer's power to set forth in full detail the processes of such eliminative diagnosis. But it cannot too forcibly be insisted that the diagnosis of appendicitis is not more difficult than that of any other local internal inflammation. This, indeed, would seem a superfluous assertion, while so many believe themselves able to diagnose even the particular varieties of the disease. Except by abdominal section there is no possible way of ascertaining the extent of the disease at any given time. Nor can the rate at which the inflammation travels ever be estimated with any sort of accuracy. Perforation may result in a few hours after the onset of the attack, or it may suddenly occur after many days of apparently mild inflammation. It is, therefore, puerile and ridiculous to lay down rules as to the proper day and hour for operating.

In perhaps half of the cases, perforation may not occur; but in half of these apparently recovered cases there will probably be a recurrence; and in half of these recurrences perforation is finally likely to happen. Of the cases where perforation does occur probably fifty per cent. die because of it. Such, however, would not be the sad fact if even then proper surgical treatment were generally employed.

The sum of it is that, under the present methods of treating appendicitis, in more than half of the cases consequent disasters are allowed to occur which are attended by a higher death-rate than that of pneumonia or even of diphtheria.

Were the appendix of any use, or were there danger in removing it at the very onset of its inflammation, there would be some excuse for this terrible mortality. Such, however, is not the case.

(To be continued.)

IS ACUTE POLIOMYELITIS UNUSUALLY PREVALENT THIS SEASON?

BY JAMES J. PUTNAM, M.D.,
AND EDWARD WYLLYS TAYLOR, M.D.

It was conclusively shown by Dr. Wharton Sinkler of Philadelphia, as long ago as 1875,¹ that poliomyelitis ("atrophic spinal paralysis," "infantile paralysis,") is pre-eminently a disease of the summer months of the year; and the statistics of foreign observers have proved that similar conditions prevail abroad.

An analysis of the cases observed at the Massachusetts General Hospital confirms Dr. Sinkler's conclusion, with the exception that, so far as the small aggregate numbers prove anything, they show that among us there is a greater prevalence of the dreaded affection in September than in August. The figures for 1888 to 1893, inclusive, are as follows:²

DATES OF ONSET BY MONTHS.

January	3 cases
February	0 cases
March	0 cases
April	4 cases
May	0 cases
June	4 cases
July	3 cases
August	6 cases
September	11 cases
October	6 cases
November	2 cases
December	0 cases

It would not have seemed worth while to report these few observations had it not been that the number of cases observed at the Massachusetts General Hospital in September and October of this year is decidedly larger than usual, and that the experience of the physicians at the Children's Hospital, and the Boston Dispensary, and the consultation practice of one of the writers, furnishes additional evidence that the disease is more than commonly prevalent this autumn, in spite of the persistence of what from the ordinary point of view would be called remarkably fine weather. If we put together these four sets of cases, and compare this year with 1892, as regards the Children's Hospital and the Dispensary, and with an average of the previous five years³ as regards the

¹ American Journal of Medical Sciences for April, 1875.

² There is an error arising from the lack of statistics for November and December, 1893; but for present purposes this is unimportant. The figures would have been larger but for the fact that a number of cases were omitted on account of doubt as to the dates of onset.

³ In 1892 there were no cases during August, September and Octo-

Massachusetts General Hospital, and add in three cases observed privately during October and November, 1893, we get the following figures:

August to November, inclusive, 1892	6 cases
August to November, inclusive, 1893	26 cases*

* In addition to the out-patient cases at the Children's Hospital, there are three acute cases in the wards which we did not count.

Of these twenty-six cases, eight had their onset in August, eleven in September, six in October, and one in November. Even if we leave out the three private cases, and admit that 1882 was an "off year" for poliomyelitis, as seems to have been the case, still it can hardly be doubted that the influences are unusually favorable for the development of the disease this year.

In 1891, similar conditions, perhaps, prevailed, since between August and November seven cases presented themselves at the Massachusetts General Hospital, the same number as this year. In 1888 there were six cases; but in 1889 only three; and in 1892, as stated, none at all. The attendance at the department during this period has been steadily increasing.

It is foreign to the purpose of this paper to attempt an analysis of the subtle meteorological influences which make the summer and early autumn months relatively so dangerous. Our main object is to lead other physicians to contribute their experiences to reinforce or counterbalance ours. It may, however, be of interest to indicate the lines of research which the facts so far gathered have marked out.

To what is the unfavorable influence of the summer due? It may be an affair of weather, as such, though obviously heat, pure and simple, is not the important factor; or the weather may act as favoring some other influence, perhaps bacterial in character. The reasonableness of this latter view is now conceded by many good observers; but it is certain that its advocates are still far from having made good their claim.

In favor of the doctrine is the fact that the outbreaks of the disease occasionally occur in distinct epidemics.⁴ These so-called epidemics, however, have always happened in late summer and early autumn, and perhaps represent only exaggerated examples of the regular annual increase. It is also noteworthy that in some of these epidemics atypical and relatively virulent cases have been unusually common. Again, the occasional occurrence of acute poliomyelitis in conjunction with acute polyneuritis,⁵ which is probably always of toxic, and often of infectious origin, bears out this view.

A striking case of this sort was published by one of us some years ago.⁶ The evidence of the neuritis was, to be sure, only clinical in character, but the symptoms left little doubt on that score. The post-mortem examination of the patient, who died two months after being taken sick, showed the anterior gray matter to be threaded, on each side, throughout

bor at the Massachusetts General Hospital, and only one case at the Children's Hospital.

⁴ Cordier: *Lyon méd.*, 1888, lxxvii, 1, 2.

⁵ Oxholm: *Citation in Neurol. Centralblatt*, 1890, xii.

⁶ Médin: *Citation in Schmidt's Jahrbücher*, 1891, No. 6.

⁷ Hegler: *Deut. Med. Woch.*, 1893, No. 40.

⁸ Stukler: in Keatings' *Cyclopædia of the Diseases of Children*, vol. iv, 6.

⁹ Marie: *Mal. de la Moelle*, 1892.

¹⁰ Strümpell: *Lehrbuch*.

¹¹ Pal: *Die Multiple Neuritis*.

¹² Strümpell: *Loc. cit.*

¹³ Gowers: *Diseases of the Nervous System*, etc.

¹⁴ Examination of the Spinal Cord in a Case of Poliomyelitis of the Adult, etc., by James J. Putnam, *Journal of Nervous and Mental Diseases*, January, 1883.

the length of the cord, with a line of inflammatory softening.

A patient, also an adult, whose case may be of similar character, is now at the Massachusetts General Hospital, under the care of Dr. F. C. Shattuck, who kindly gave one of the writers the opportunity of examining her. The atrophy affects all, or almost all, the forearm and hand muscles of both arms, but not the muscles of the legs. The onset was in August, and the symptoms seemed at first to point to a neuritis; but, later, the atrophy became so predominant, yet without being associated with any considerable nerve or muscle tenderness or impairment of cutaneous sensibility, that the diagnosis of poliomyelitis seemed probable. The case has not, however, been included in our summary.

One of the private cases above alluded to was also distinctly of neuro-myelitic character, and practically of the adult form, affecting, as it did, a young girl of twelve, who was living under the very best of hygienic conditions. This case is especially interesting from the fact that the onset was during the pleasant and cool weather of the current month.

Except for these two cases, and one case in a young child, where the initial pain was greater than usual, there has been nothing to mark the group of cases seen this year as belonging to any unusual type.

It is noteworthy, as against any strongly marked epidemic influence, that the patients did not come to any extent, from any one locality, but from different parts of the large area of the suburbs of Boston. The Charlestown and Chelsea district, however, furnished several cases. Very few of the patients came from Boston proper; and, as further evidence of the immunity of the city, it may be said that the records of the City Hospital yield but one case for this summer and autumn (onset in October), and none for last year.

In conclusion, the writers ask other physicians who have seen these interesting cases, or may see them in future, to send them brief records.

Clinical Department.

A CASE OF ANGIOMA OF THE NASAL SEPTUM.¹

BY FREDERIC C. COBB, M.D.,

Physician to Throat Department, Boston Dispensary; Assistant Physician Throat Department, Massachusetts General Hospital.

THE patient, Lizzie B., fifteen years of age, came to the Out-patient Throat Department of the Massachusetts General Hospital in October, 1892, complaining of obstruction of the right nostril and epistaxis from the same side. The duration of these symptoms was about six months. There had been no sneezing, and only occasionally a thick yellow discharge from that nostril. She was anæmic, always subject to headaches, and exhausted by the least exertion.

Her previous history, with the exception of an attack of scarlet fever, six years ago, was negative.

Examination of the anterior nares showed them to be normal on the left side. On the right side the nostril was wider, the turbinates slightly atrophic. Hanging from the septum by a thin pedicle inserted near the junction of the skin and mucous membrane

¹ Read before the Laryngological Section of the Pan-American Medical Congress, September 6, 1893.