at night. In the general symptomatology in which I made the statement of the nocturnal attack prevailing, I included both thrombosis and embolism, which no one will doubt occur more frequently at night. As regards the neuronic theory, I agree with Dr. Patrick that it has not been proven. On the other hand, neither has it been disproven, and I am still inclined to cling to a theory which is fascinating and which explains, in an apparently reasonable manner, the mechanism of some normal and abnormal brain functions.

DANGEROUS HEMORRHAGE AFTER REMOVAL OF ENLARGED TONSILS AND ADENOIDS WITH THE REPORT OF A CASE.

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April 30, 1901, at 5 p.m., I operated, at the Worcester City Hospital, upon Josephine H., a child of 5 years, removing large tonsils and an adenoid growth. The operation was done under ether anesthesia, which at no time was profound, but, on the other hand, just enough was given to keep her beyond the border line of consciousness. The tonsils were removed first and when the hemorrhage, which was rather profuse, but not alarming, had ceased the adenoid growth was removed. The tonsils were removed with a guillotine and the adenoid with forceps and curette. The bleeding promptly stopped, the recovery from the anesthesia was satisfactory and I left the hospital with a sense of relief that an operation that had caused me some anxiety was successfully completed.

At 7 o'clock I received an urgent call to come to the hospital. Much nausea had followed the ether, and previous to my coming the child had vomited a fluid resembling fresh blood at five different times, and about two ounces each time. She had been very thirsty and begged for ice constantly. She had also been very restless and tossed from one part of the bed to another, throwing her arms about and kicking off the bedcloths. The loss of blood, great thirst, restlessness, sighing respiration and failing pulse alarmed the attendants and I was called.

When I saw her bleeding had stopped. The throat had been examined, but no bleeding points were found, and I did not disturb her for further examination. She was greatly bleached, her lips were colorless, ears waxy and pulse very rapid and thready. To insure freedom from disturbing influences, she was put into a separate room under the care of a special nurse. At 8.30, from two to three ounces of dark-brown vomitus, mixed with much blood-clot, was emitted. This did not have the bright character of the former vomitus. The thirst was now intense. At 9, the pulse was 160, the restlessness had increased and delirium had developed, the hallucination being a glass of water on the floor. At 10 o'clock, no radial pulse could be felt, but, with the stethoscope, the heart-beats were found to be 192 per minute. The panting respiration was often interrupted by sighs and the child had lost all interest in her surroundings, although the restlessness was as marked as ever. At this time an enema was given, consisting of the following:

R. Albumin water 3ss
Bovine 3 3/4
Peptonized milk 5i
Pinch of salt,
Dover's powder gr. iiss

This was retained.

At 11, the pulse was 180 and a faint flickering could be felt at the wrist. At midnight, however, the pulse had not continued to improve, it being 184, and it was decided to administer a salt solution subcutaneously. The solution was made of common salt and water by adding to a pint of water, made sterile by boiling, a dram of salt. This was reboiled to prevent the deposit of a sediment. The solution was then placed in a glass bottle, with a cotton stopper, and again sterilized in the oven. The apparatus for administration consisted of a glass cylinder holding eight ounces, drawn to a tube at its lower end, to which was attached a rubber tube; to the distal end of this was attached the hypodermic needle. To keep the fluid at the proper temperature the rubber tube was run through a glass tube around which was laid a water-bag filled with hot water. The fluid was forced into the tissues by gravity.

Six ounces of the salt solution were injected under the skin, inside the inferior angle of the scapula, and in half an hour it was entirely absorbed. The effect on the pulse was striking. At 1 a.m. it was plainly counted at the wrist, beating at 160. Besides this injection, Jacobi's mixture was started at midnight. This was given by mouth and consisted of

R. Barley water 3iv
Brandy 3ii
White of one egg.
Salt and sugar.

It was given in doses of 3ii every fifteen minutes, which meant a teaspoonful of brandy every two hours.

At 1 o'clock, twenty minims of elixir of chloralimid was given by mouth. At 2, the pulse was 160 and the nutrient enema was repeated. At 3, she vomited two ounces of a bright-red fluid mixed with blood-clots. The pulse was 160. Four and one half ounces of salt solution was injected below the other scapula. At 4, the pulse was 176. At 5, the pulse was 160, and the nutrient enema was repeated. This was followed by undisturbed sleep for twenty minutes. She made no objection to the enemata. At 6, the pulse was 160. At 7, it was 152. Ten and one-half ounces of salt solution was given, and at 8 o'clock the pulse had fallen to 140. At this time Jacobi's mixture, which had been given during the night every fifteen minutes, or as near that as possible, without awakening the child, was omitted, and brandy 20 minims, with sulphate of strychnia, 1/120 gr., was administered every two hours.

The child was kept in the hospital for about a week. She was fed with great care and very closely watched and made steady progress to recovery.

This patient I had not seen previous to the time set for the operation, the arrangements having been made over the telephone, by her father, who said a physician had seen the child and advised operation. She was a delicate-looking child, frail, with transparent skin and large eyes, and when I saw her I was quite taken aback, and for some minutes tried to find with myself some excuse for postponing or modifying the operation.

In such a case four courses suggest themselves: 1. Postpone operation and endeavor to get the child in better condition. 2. Remove the tonsils without anesthetic, paying no attention to the adenoid. 3. Remove the tonsils under an anesthetic and if the bleeding is slight and an adenoid is present remove it also. 4. Do the whole operation, even if a considerable amount of blood is lost in the tonsillotomy.

The last course, the one contrary to my usual practice and against my judgment, is the one I pursued.

I did it because the child was there and the parents expected the operation to be done, and, furthermore, because it was evident that the child needed the help that would come from the removal of very large tonsils. The adenoid was removed because I felt that the child might not be brought for a subsequent operation, and, therefore, this operation would be incomplete; to her disadvantage and my discredit.

However, I followed the operation through with much caution, both as to the use of the anesthetic and the removal of the growths. The hemorrhage from the tonsillotomies was profuse, but did not alarm me. I had seen much severer ones with no untoward after-effect and I did not feel that the risk was great; but I reckoned without my host.

The operative hemorrhage alone probably would not have produced alarming symptoms, neither would the poor recovery from ether, but she was of such a frail constitution that the weakness brought about by both these causes induced the post-operative hemorrhage, which was serious and bade fair to be fatal. One or two of the obstacles to recovery she might have overcome, but the three were too much for her, and it seems she surely would have died but for the prompt and skilful treatment she received. She had all the advantages of a well-equipped institution, and particularly of the services of a peculiarly capable house physician, Dr. W. W. McKibben, to whom I am indebted for many of these notes.

This experience confirms me in the conviction—that under the age of 5 years one should do the complete operation for removal of tonsils and adenoids with a great deal of caution, and where the tonsils are very large and the child is delicate and anemic, the complete operation under ether should not be attempted. The tonsils can and should be removed, but this can be done with no anesthesia or with a few whiffs of chloroform. The incompleteness of the operation should be explained to the parents and a future removal of the adenoid growth, under an anesthetic, should be considered and planned. Indeed, after the gain in health that usually follows the removal of the tonsils this becomes a safe proceeding.

In the consideration of this topic it would be proper to discuss the methods of operating that have been proposed to minimize hemorrhage. Some of them I have tried, others have promised such slight advantages that I have not tried them, and I will not take time for other enumeration.

For young children, I find no instrument is so generally useful as the tonsillotome for the tonsils, and the forceps, curette and finger-nail for the removal of adenoid growths. The choice is to be exercised not so much in the selection of instruments and methods, as in careful observation of the patient and the selection of proper time and conditions for the operation.

NOTES ON ONE HUNDRED AND FIFTY CASES OF SMALLPOX IN PRIVATE PRACTICE.

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There exists some diversity of opinion among members of our profession regarding the true nature of the disease which has been rather epidemic in some sections of our country during the last few years, and which has been termed by the various writers variola, modified

smallpox, pseudo-smallpox, varicella, Cuban itch, elephant itch, Philippine rash, etc. It is true that the great majority of physicians recognize this disease as genuine smallpox; yet there are a number of careful observers who will not admit that such is the case, but who insist that this is a new unclassified disease; others again hold that it is an unusually severe type of chickenpox.

During the past twelve months I have had the opportunity to observe and treat 150 cases of this disease, as they occurred in private practice, principally among the negroes, in Central Louisiana, and I do not hesitate to state that these cases were genuine smallpox and could not be confounded with any other disease. I also saw a number of cases of variola in Northern Mexico three years ago, just before the disease became general throughout the United States, and these cases were identical in type with my recent ones.

Clinically, the course of my cases followed that laid down in the text-books to a large extent, with the exception that the secondary fever was low in most of the patients. It was, however, high in a number and altogether absent in a few of the extremely mild cases.

The onset was usually sudden, with high temperature, gastric disturbances and pains in the back. This last symptom proved to be quite a diagnostic point in my cases, as it would not yield to medication before the eruption appeared. The period of eruption followed also the typical course, papule, vesicle, pustule and crust, the vesicles becoming distinctly umbilicated in nearly every case, and the four stages occurring in cyclic order; not as in varicella where all stages of eruption may be found at one time. In 34 of my cases the eruption was confluent, no part of the body being exempt from attack. Here the pustules coalesced, forming large patches over the entire body, making a picture horrible to behold, and a condition almost unbearable for the poor sufferers, who can not be comfortable in any position.

During desquamation, which is prolonged here owing to the deepest structures of skin being involved, large casts are thrown off from the four extremities. This is a condition which never exists in varicella as far as I can learn and I have never heard of the eruption in varicella appearing upon the plantar surface of the feet and the palmar surface of the hands. There was delirium present in all these severe cases.

The course of the disease ranged from three to eight weeks, according to the intensity of eruption and the amount of constitutional disturbance accompanying the case. It is true that a number of the discrete cases suffered no further inconvenience than that occasioned by the amount of eruption present, and felt fairly at ease after eruption appeared. In all of the confluent and in a few of the discrete cases, the prostration was very marked, and as stated, the disease followed the typical orthodox course. It was impossible to determine by the prodromal symptoms whether a discrete or confluent case would follow, as in a number of instances the most severe prodromes would be followed by a mild eruption and vice versa. The disease seemed to have a selective preference for the negroes, probably on account of their careless personal hygiene, although a number of whites were also attacked.

One of my cases proved fatal and that was the only one with a hemorrhagic type of the disease I have seen. This was a young mulatto about 25 years old who had