minute embolus of bacteria which passes by chance to these slowed areas and we have the two etiological factors which are believed to contribute to the possibility of a local thrombosis.

In support of this conception, it is submitted that if the locality of hematogenous boils or abscesses of the surface of the body are studied carefully, it will be seen that the most common localities are where there is localized external pressure. The pressure of the collar on the back of the neck is a fair example.

It is apparent from the reading of such articles as have come to my attention, dealing with the etiology of cancer, that it is this inherent power of cell reproduction which is being studied and not the cause of the disassociation of the cancerous tissue from its inter-relationship with other tissues of the organism.

This inherent power of cell reproduction is just as apparent in bacterial life as in cancer cell life.

The transplantation of cancerous tissue in animals is in all probability subject to the same laws as those which govern infection of tissues with bacteria. What we know today of the grouping of blood in blood transfusion may be an example of the same law which prevents the transmissibility of certain cancerous tissues in certain types of species. In short, the organism has no resistance to the toxins of cell reproduction of its own issue, but can develop a defence to or a cytoidal substance for cells which are foreign to that organism.

The necessity of blood grouping in doing skin grafts, referred to by J. F. Pemberton,⁶ may be another example of this resistance to foreign cell invasion.

To summarize the theory, cancer is the result of the breaking down of the mechanism which maintains the very apparent inter-relationship of tissues of the complex organism. The moment that this inter-relationship is broken, the cell or cells thus freed revert to their primary fundamental; that is, the unchecked power of reproduction.

This point of view places bacteria and the disassociated cell of the complex organism on a like basis. The great difference between these single cells, the bacteria and the disassociated tissue cells in their action on the complex organism lies in the fact that the bacterial cell is a foreign invader to which the complex organism has developed a partial or complete defence or immunity. The by-products of the disassociated cells, however, are of the same nature as the by-products of the other similar tissues of the body and the complex organism is, therefore, unawares, so to speak, of the local change until the process overwhelms the life processes of the complex organism. Hence cancer is 100% fatal.

It is suggested that the mechanism for main-

taining the inter-relationship of tissue growth is the sympathetic nerve system, more specifically spoken of as the trophic nerves.

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THE ETIOLOGY OF HYSTERIA

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PHYSICIANS who have been in practice for many years have, no doubt, had sufficient opportunity to observe the symptoms in the ordinary cases of hysteria; symptoms such as convulsions, contortions and contractions, temporary loss of speech and of consciousness. They have noticed that such cases, especially among the female sex, have little in common, the symptoms, if closely noticed, reveal the fact that no two patients present the same signs of the neurosis. It is also true that a description of the disease in any text-book gives a long list of symptoms, and we wonder how any one patient can endure so much agony, perhaps voluntarily. This in itself only goes to prove that we should know that not any one patient possesses all of the symptoms described under the heading of hysteria.

After a careful study of a large number of such cases, it has been discovered that, although profound emotional shock is the cause of onset of an hysterical convulsion, it is not the cause of hysteria itself. It is not caused by intense worry or by the concentration of the mind upon the self. If worry were the cause of hysteria, then we all would be suffering from the neurosis. The emotional shock simply acts as a cause for the patient to lose her conscious mind, and thus to be thrown into a subconscious mind, or, as some writers are wont to call it, the "unconscious."

The patient, during an outbreak of hysterical symptoms, really discloses the contents of her unconscious mind. She now presents to us, a great store of her past experiences,—from the cradle to the present time. Many childhood practices are re-enacted, such as the crying and

the convulsive distortions of early life; the repeated and prolonged yelling and the pulling of the hair. We also notice the hysterical pains which are so common among children. We can remember how small children refuse to stand on their legs when they are dissatisfied with the commands of parents. They exhibit the feelings of hate when called upon to do errands which they are reluctant to perform. When parents implore their children to obey them, it makes matters worse. Such instances are common in hysterical patients. The more that a physician tries to soothe a patient, ill with hysteria, the more does she become violent, *i.e.*, the attack of outbreak of emotions becomes worse, but the disease itself, *i.e.*, the hysteria, as a neurosis, always remains the same. The disposition is firmly rooted in the unconscious mind, and the so-called cure of the attack of emotional fury does not affect the disposition, or the predisposition to the disease.

It is a well-known fact that sympathy extended to such a patient only helps to increase both the severity and the duration of the attack. If we wish to abort it, we should forsake our kindness to the patient and to act rather harshly towards her. This means of treatment most always succeeds in stopping, more or less abruptly, the convulsive movements. It certainly does not cure the hysteria, because we know that hysterical people have a large number of emotional onsets brought about almost every time that some real worry or trouble involves their minds.

Hysteria is not hereditary. Perhaps it runs in families for the reason that parents give to their children the same treatment during life which they themselves received when they were children. That which is hereditary is the baby-like constitution, the infantile and undeveloped self-control, one of the highest faculties of the human mind. As children, the hysterics have always had their own way, and the practice of giving to children anything that they desire, is full of folly, and independence is sadly lacking in them during their future years.

Hysteria is very common among Hebrews, French, Italians, and the peoples of the near East. These races bear and like large families. They caress and kiss their children regularly. They give them anything that they wish, be it food or drink, and this is why we observe so many cases of gastroenteritis among them. The

children grow up with a "crutch" and lean upon the shoulders of their parents. Even after marriage, children are prone to live in the same houses with them. Married daughters, in times of trouble or sickness, act like mere children, and weep when their parents are not at their bedside. They expect very little or no sympathy from their husbands, and if such sympathy is extended them, it is far different from that which they have been accustomed to receive from their parents. When such a woman has misfortune embrace her, she does not attempt to find the cause of it, nor does endeavor to fight it bravely, but instead, she tries to forget it, and this she does by falling into a faint or by going through an hysterical attack of unconsciousness. Her conscious mind has immediately forsaken her and in its place, she has substituted her unconscious mind. This unconscious state, of course, brings her back to the days of her childhood, when all was serene, and without trouble or worry. She is once again a child and she plays the part of the child. Try to calm her in her attack, and you are extending to her a mute justification for her actions. Talk to her kindly and she will perform those acts which she has done when she was a youngster. She will refuse to accept any means which are employed by the physician to assist her in ridding her of the attack. Give her a spanking, talk to her harshly and ignore her actions, refuse to be bothered with her condition, and leave her alone, then you will invariably notice that she will complete the attack and stare around the room as if she had just entered it.

During an attack, it is well for the physician to notice every symptom, because every such symptom will act as a clue to the cause of the hysteria itself. An analysis of such actions will really serve as a means of discovering that which has during early life played an important rôle in the development of the neurosis. The parents of the patient might be able to inform you of instances in past years when their children, now hysterical, had exhibited the same kind of peculiar actions. Some of these symptoms might not be the exact repetition of juvenile performances, but then they are perhaps masked and should be "unmasked," and their true interpretation elicited.

After a length of time has elapsed, the physician ought to try to study the dreams of the

hysterical patient, because this and the study of the symptoms during an attack of violent emotional outbreak will make it possible for him to arrive at the latent or unconscious thoughts of our unfortunate sufferers. Psychoanalysis lays great stress upon the dream interpretations, but to my knowledge, I think that such a course, coupled with that of the study of the manners in which the patient goes through her emotional demeanor, would permit us to reach the rendezvous much earlier and easier.

The psychoanalyst having slowly unravelled the whole life history, by means of regular interviews in a conscientious way, the patient will herself notice distinct parts in her life history which have had important connections with the emotional attacks of hysteria. She will discover her weaknesses, also her failures which gave her a diminution in self-control: she will likewise perceive that there has been something similar in every attack which she has had: something which from her early life has really repeated itself.

The present worry or trouble has only served to displace the conscious by the unconscious, just as the friction of a match causes the sulphur and phosphorus to ignite.

REPORT OF TWO CASES OF BLASTOMYCOSIS.*

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SYSTEMIC BLASTOMYCOSIS, although not a common disease, is probably not as rare as some of our text-books seem to suggest.

Fifty cases have been reported in medical literature since Busse reported his case in 1894. I have been unable to find a single case reported from Michigan, although Sihler, Pappard and Cox, in their report of a case, mention the fact that the majority of the cases reported have been from the vicinity of Chicago, and they mention Michigan as a locality where cases have been found.

The disease is particularly important in connection with diseases of the chest, because the onset, early history, physical and x-ray findings are so similar to a tuberculous invasion. Necropsied cases show the lungs to be more fre-

quently affected than any other organ, with 97 per cent. positive, the skin running second, with 90 per cent. As the disease progresses, lesions become numerous and may involve any part of the body.

The portal of entry is probably by way of the respiratory tract.

Of the cases reported, all but three were males. Ages ranged from 17 years to 63 years, the majority of the cases being in the third decade. Unhygienic surroundings seem to favor the development of the disease. Italians and Poles are more prone to the disease.

The diagnosis depends upon finding the yeast, although the characteristic skin lesions and presence of multiple abscesses are rather convincing evidence and should at least suggest blastomycosis.

To date, there is very little to offer in way of treatment, except in surface lesions where surgery can be employed.

Potassium iodide, copper sulphate, vaccine therapy, roentgen ray, have been used, but the number of cases treated has been too small to draw any definite conclusions in favor of any of these therapeutic measures.

The disease runs a subacute or chronic progressive course; duration of reported cases ranging from four months to 17 years. Nine out of every ten progress to death within a year.

CASE No. 3089. Single, male, white, 32 years, machinist, born in Belgium. Has been in states five years, living all the time in Detroit.

Family History—Father died at age of 40. Result of accident. Mother in good health last time heard from. No tuberculosis in father or mother's family. One sister living and well. Previous History—Born and brought up in city. Not especially good environment; healthy childhood. Began work at 13 years of age. No intimate exposure to tuberculosis, as far as known. Denies venereal disease and alcohol. Smoked about ten cigarettes a day, which were inhaled. Tea and coffee moderately. Always been well and strong, up to the time of present illness. Operation for inguinal hernia 1918. Influenza, December, 1919. Present Illness—Last perfectly well, March 1919. Following month, had feeling of lassitude, noted lack of staying power. Slight cough, occasional chills and night sweats. Did not feel well enough to work, but continued until following December, when illness became acute and was diagnosed influenza. He remained in bed five weeks, then began to get around, and returned to work. Strength did not return to normal. Continued

* Read before Michigan Trudeau Society, October, 1920.