thorough evacuation of the bowels; the proper regulation of the diet; and the administration of some efficient intestinal antiseptic, as, e. g., salol.

### OXYGEN.

It has been said that, in pneumonia, one of the most ominous of the physical signs is the presence in the sick-room of an oxygen outfit! In consultation practice this may be true, but I do not believe that the implied stricture is fairly applicable to ordinary family practice. Indeed, I believe that the employment of oxygen inhalations, begun early-certainly at the very beginning of that slight but steadily progressive increase in frequency and shallowness of breathing which the experienced physician so dislikes to see-and frequently and freely given, is a useful measure, and is one of the many things which may sometimes save a life which, otherwise, might be lost. I am not able to give any reasonable explanation as to how or why oxygen acts beneficially in these cases except the unsatisfactory one that it is a respiratory stimulant. Nevertheless, I use it, along with strychnia, caffein, camphor, morphia, etc., each of which agents. properly employed, are of the greatest value.

## RAPIDITY OF CHANGE.

In typical cases of pneumonia there are three striking features which have always attracted the attention of clinical observers. I refer to the sudden and furious onset which transforms, in a few hours, the man of robust health to one prostrate with serious illness; the rapid subsidence of the acute symptoms at the time of crisis, by which he passes, again in a few hours, from a raging storm of morbidity to a state of comparative well-being; and the unexpected celerity with which the collapse which speedily ends in death appears upon the scene of apparently satisfactory progress. These rapid transformation scenes are, however, peculiarly characteristic of pneumonia, and the observant physician will have early noted that, from first to last, the clinical changes occur with remarkable suddenness. This leads me to advocate, with all the earnestness which I possess, that pneumonic patients be given careful, observant, intelligent and unremitting attention. They should be visited at frequent intervals or, in some cases, be given constant attention. I have had occasion, in more than one instance, to feel that the patient's recovery was due to the fact that the physician was present and prepared to act at the moment unfavorable and portentious conditions arose, and I am convinced that, in many cases, if such medical attention is not given, the patient is being deprived of some of the resources of our art, and that his chances of recovery are thereby directly lessened. It is scarcely necessary to remark, in the presence of this audience, that, in addition to the observations which were formerly made by every physician, the practitioner of to-day must bring to bear upon his case, in an intelligent manner, and in detail, and often, all the diagnostic resources of our time, including those of the clinical la-boratory. In especial should his attention be directed to the state of the heart and capillaries; the urine; the blood; the nervous reflexes. The nursing and surroundings of the patient should be of the best which his means can procure, for I am sure that in but few positions of peril can the beneficent power of money be shown to better advantage than in a well-generaled combat with pneumonia.

**Paraffin Prothesis.**—Herczel states that he has prevented or cured prolapse of the rectum in a few cases by Gersuny's injections of paraffin. He has also thus cured a vesicovaginal fistula, etc. CASES OF SARCOMA AND OF HODGKIN'S DIS-EASE TREATED BY EXPOSURES TO X-RAYS—A PRELIMINARY REPORT.

WILLIAM ALLEN PUSEY, A.M., M.D.

Professor of Dermatology in the Medical Department of the University of Illinois.

# CHICAGO.

#### SARCOMA.

CASE 1.—This case was referred to me by Dr. A. J. Ochsner, Professor of Surgery in the University of Illinois. The patient entered Augustana Hospital in Dr. Ochsner's service August 18, 1901, when the history, of which the following is an abstract, was obtained: J. L. B., aged 24, clerk, had the ordinary diseases of childhood, otherwise he has always been well. He has not had syphilis. The family and personal history is without significance. Six months ago—February, 1901—he noticed a small hard swelling the size of a filbert below the angle of the jaw on the left side of the neck. This gradually increased in size. Ten weeks ago—May, 1901—he noticed a similar hard swelling the size of a filbert on the right side of the neck about an inch below the mastoid process. This has increased in size rapidly. During the past week he has been troubled with morning headaches, usually relieved by taking food.

Present Condition: He is a fairly well-nourished, sparebuilt man. A loud harsh murmur accompanies and follows the first sound of the heart. The lungs are normal. There is a hard, freely movable swelling the size of a hen's egg just below the angle of the jaw on the left side, which is not tender or painful. There is another hard mass underneath the upper third of the sterno-cleido-mastoid muscle on the left side, which is not freely movable, nor tender or painful. There is a very hard mass on the right side of the neck below the ear and mastoid process the size of a man's fist, which is not freely movable, nor tender or painful.

The clinical diagnosis of sarcoma was made by Dr. Ochsner and the tumors on the left side were removed August 19. The tissue was sent to Dr. Robert Zeit. Professor of Pathology in Northwestern University School of Medicine, for microscopic examination. Dr. Zeit's diagnosis was "small round-cell sarcoma." The patient made a prompt recovery from the operation and on September 2 was sent to me for a month's exposure to x-rays preliminary to a second operation. The left side showed a healthy scar. The condition of the right side of the neck at that time is shown in the accompanying photograph-Fig. 1-which, however, fails to show the full extent of the tumor. The swelling extended from in front of the angle of the jaw to within an inch of the posterior median line, and from the mastoid process almost to the clavicle. It was rapidly increasing in size. It was very hard, not freely movable and was now tender. The neck was almost rigid from the interference of the tumor with motion. The circumference around the neck over the tip of the chin, the apex of the tumor and the lower border of the hair was 21 inches.

The patient was put under x-ray exposures immediately, and these were continued from September 2 to September 27, during which time he got 21 exposures, with a hard tube and a weak light. The distance of the tube from the surface was maintained at 5 cm. and the length of the exposures varied from ten to fifteen minutes. Slight erythema appeared on September 17, and by September 27 this had developed into pronounced dermatitis, when the exposures were stopped. Within the next six days the dermatitis increased considerably and the surface became dark red, tender and denuded of horny epidermis. After this the dermatitis rapidly subsided and by October 12 was practically well. The effect of the exposures upon the tumor was almost magical. Within ten days it had shrunken perceptibly and the motions of the head were freer. On September 17 the circumference around the chin was reduced to  $17\frac{1}{2}$ inches, a decrease of  $3\frac{1}{2}$  inches. On September 25 this was  $16\frac{3}{4}$  inches and the tumor was reduced to the size of an olive. On October 11 there was no trace of the disease left except a small, freely movable, painless gland not larger than an almond kernel. There was no swelling, and all stiffness and interference with motion had disappeared. The condition October 11 is shown in the accompanying photograph—Fig. 2. On October 27 he reported to me as follows: "The gland you described as as large as an almond pit seems to be going away. It is not as solid as it was and I can move it freely. I have started to work." On December 7 he writes that as far as he can tell this side of his neck is as well as it ever was. The gland, he thinks, is now about half the size of an almond pit, and he can find it only by careful



#### Figure 1.

search. This report is repeated in a letter of January 12. He also reports that since September he has gained 12 pounds in weight.

We have here then a clinical diagnosis of sarcoma by Dr. Ochsner and a microscopic diagnosis of small roundcell sarcoma by Dr. Zeit. There can not be the slightest doubt that the tumor on the right side of the neck was of identical character with that on the left, so that the diagnosis of this tumor must be small round-cell sarcoma, a highly malignant variety of the disease. Under x-ray exposures alone—for the patient was given absolutely no treatment except x-rays—this sarcoma was made to disappear, and after three months without treatment it has not shown any evidence of recurrence.

CASE 2.-Man, age 67, osteosarcoma of the right shoulder,

with symptoms of sarcoma of the bladder. There was profound cachexia and evidences of general sarcomatosis. The patient was put under x-ray exposures, chiefly with the hope of relieving his pain. He was given 16 exposures without any effect upon the tumor, but according to his voluntary statement with considerable relief from pain. With my approval the treatment was discontinued.

CASE 3.—Woman, age 60, with extensive inoperable sarcoma involving the right pectoral muscles and the right shoulder. She has been under treatment for a month with perhaps sma., shrinkage in the tumor. She was suffering from severe pain when the treatment was begun and was running down in strength. According to her statement her strength has increased considerably and there is great relief from pain. Her physician, Dr. William Fuller, of the University of Illinois. who referred the case to me, tells me that there is no doubt about the great relief from pain.

The second and third cases are reported, of course.



#### Figure 2.

simply that my record may be complete. The third case shows as yet nothing except some evidence of relief from pain, which is usually the prompt result of the use of x-rays in malignant neoplasms. The second case must be set down as a failure against the method, and yet I believe it may be fairly claimed that this case had! reached a stage of the disease which will probably provebeyond relief by any local method of treatment that will, ever be devised.

In the first case I believe the definite effect of the x-rays on a sarcoma is demonstrated as conclusively as a demonstration can be made in medicine. There is no link lacking in the evidence in this case of the effect of x-rays on a sarcoma. It is impossible to believe that the disappearance of this sarcoma was simply a coincidence

with the exposures to the rays. At the time the treatment was begun the tumor was growing rapidly, and its subsidence was *pari passu* with the accumulation of the effects of the rays. The patient had no intercurrent disease, such as an erysipelas, to account for the disappearance of the tumor and he had absolutely no other treatment. This is, of course, only one case, but the result is so startling that it must command one's interest. The case is not unique, although I do not recall another case in which the result was so complete. There are several authentic reports in the literature showing the favorable influence of x-rays on sarcomas, and bearing this in mind, I believe it may be maintained that in cases of sarcoma, which can not for any reason be treated successfully by surgical means, the effect of x-rays should be tried; and, further, in cases of sarcoma which have been treated surgically subsequent use of x-ray expos-



Figure 3.

ures as a prophylactic is a procedure which should be considered.

# HODGKIN'S DISEASE.

In this connection I wish to refer briefly to two cases of pseudo-leukemia which I have under treatment by x-rays.

CASE 1.—Boy, age 4, referred to me by Dr. Ochsner. December, 1900, the mother noticed a swelling in the cervical glands on the left side, and soon afterwards a similar swelling on the right side. These steadily increased in size up to August, 1901, when Dr. Ochsner made a diagnosis of Hodgkin's disease and removed the glands on the right side. On September 11 he referred the case to me for exposure of the glands on the left side of the neck. The condition at the time that the patient came to me is shown in the accompanying photograph—Fig. 3. There was a mass of glands on the left side as large as a fist. Under x-ray exposures the swelling rapidly subsided, and in two months the glands were reduced to the size of an almond. The child has had intermittent treatment from November, 1901, to the present. There are a couple of cervical glands on the right side as large as a filbert, but they have shown no tendency to enlarge and there is no swelling. The condition of the patient January 8 is shown in the accompanying photograph—Fig. 4.

CASE 2.—Man, age 50, was referred to me by Dr. L. L. McArthur, surgeon to St. Luke's Hospital. About a year and a half ago the patient noticed enlargement of the axillary and epitrochlear glands on the right side. Both glands rapidly increased in size. The diagnosis of Hodgkin's disease was made by Dr. McArthur, and for some time the patient was under treatment with paren-



### Figure 4.

chymatous injections of arsenic, in spite of which the tumors steadily grew. On November 19 I undertook the exposure of the epitrochlear gland, while Dr. McArthur continued the arsenic injections in the axillary gland. At the time that x-ray treatment was begun the epitrochlear gland was almost as large as a goose egg and very hard. Within a month it was reduced to about one-third its previous size, and at the present time it is about as large as an olive and is quite soft. In the meantime the axillary gland under the arsenic injections showed no change, and on December 18, at Dr. McArthur's suggestion, I began exposures over that gland. It was then as large as a child's head and very greatly interfered with the motion of the arm. The patient insists at present that the gland is smaller and softer, and that he can use his arm very much more freely. As an illustration of this, he is able to play billiards again, a thing he has not recently been able to do.

103 State Street.

# SURGICAL CORRECTION OF MALFORMATION AND SPEECH DEFECTS DUE TO OR ASSOCIATED WITH HARE-LIP AND CLEFT PALATE.\*

### GEORGE V. I. BROWN, A.B., D.D.S., M.D., C.M. Professor of Oral Surgery, Milwaukee Medical College, and Oral Surgeon, Trinity Hospital. MILWAUKEE, WIS.

The purpose of this discussion is to make clear advantageous possibilities in the treatment of hare-lip and cleft palate by a new method which, 1, reduces the width of the fissure and thus renders a subsequent operation for closure by operation upon the soft tissues more certainly successful and more beneficial by preserving the usefulness of the soft parts; 2, by readjustment of the unequally developed bone structures, gives a more perfect contour to the form of the face after operation; 3, makes it possible to operate successfully upon patients almost with regard to age limitations. The objects which make relief of some kind desirable if not imperative for patients so afflicted, whether the method of procedure be surgical or prosthetic, may be summed up in the two considerations, health and speech, for the purpose of all treatment must be directed toward improvement in one or both of these requisites. Malformations of this nature affect the general health of individuals chiefly in two ways, by malnutrition due to inability of infants to take sufficient nourishment properly, which interferes with normal development sometimes to so great an extent as to place the lives of such children more or less in jeopardy, and nasal catarrh caused by irritating secretions, bacteria and foreign matter which gain access to the nasal passages through the opening from the oral cavity, or constant exposure of the nasal mucous membrane to external irritants. This diseased condition usually extends to the pharynx and carries in its train many associated disorders that affect the adjacent frontal maxillary and ethmoidal sinuses, involving also the nervous and circulatory disorders.

In classifying cleft palate cases, the first division recognized between acquired and congenital cases is important but quite insufficient, and much depends upon a correct and distinct classification of subdivisions under these two heads, which will facilitate an intelligent understanding of the nature of each division, its relation to the particular kind of treatment required and the special difficulties each presents that must be overcome in effecting a cure. Strangely enough, there seems to be little or nothing especially clear or valuable in this direction to be found in literature upon the subject.

Acquired cases have one of two etiologic factors: disease or accident. When the tissues of either soft or hard palate are destroyed by pathologic condition, naturally the advisability or inadvisability of an operation would be determined by the nature of the cause. For instance, in syphilitic cases, operation would usually be contraindicated, because of the tendency to still further loss instead of restoration of tissue. If the opening be confined to the hard palate, as frequently occurs from necro-

\* Read at the Fifty-second Annual Meeting of the American Medical Association, in the Section on Stomatology, and approved for publication by the Executive Committee. sis, such an opening is much more easily and better covered by a nicely-fitted denture, but if the tissue of the soft palate has become involved, speech is impaired to such a degree that more or less risk is warranted in the hope of restoring the ability to speak distinctly.



Classification of congenital cases presents difficulties which can best be understood by considering them with regard to the nature of the deformity, since there are such notable differences between typical forms of



congenital fissures of the palate and lip, each with its own characteristic difficulties to combat in treatment, and again, in order that the surgeon may intelligently undertake their correction, it is necessary that



### Figure 3.

another distinction be made with due regard for the vital question of age in relation to operative procedures. Under 1, we distinguish clefts in the soft palate with hard palate normal; 2, a continuous separation through both hard and soft palates; 3, double cleft, which may