sors, free of all connective and fatty tissue, and rapidly transferred to the surface to be filled.

3. Before the flap is placed on the denuded surface, all hæmorrhage must be well stopped.

4. Perfect immobility of the lid must be obtained by stitching its free edge to the lower, or to the cheek, and care taken to have the flap in exact apposition, no air bubbles being allowed under it.

5. Stitches are not required to hold the flap in position, since suppuration at the stitch holds may be a source of infection, and the parts can be held in perfect apposition by gold-beaters' skin or non-contractile collodion.

6. The size of a transplanted piece must be one-third larger than the surface to be filled, since the skin contracts after being dissected loose.

7. The lid must be brought as far down as possible, since the contraction that follows the healing process will lessen the transplanted surface to one-third its original size.

8. The dressings should be left undisturbed for five or six days, in order that firm adhesion may be formed between the surface and the transplanted skin.

9. The surface to be filled must be a freshly denuded one, for if it be a granulating surface, the secretions will lift up the flap, and sloughing follow.

DR. HOTZ, of Chicago: The final result of the transplantation of Wolf's flaps is seldom satisfactory; its shrinkage makes the lower lid turn down again; its thickness makes the upper too heavy. Prof. Thiersch's method is better suited for the upper lid and also good for the lower lid. He takes large flaps of epidermis including the Malpighian layers, shaved off from the arm with a razor. These grafts take much better than Wolf's flaps; they make a thin, light coat like the original skin of the upper lid, so that it can be opened and closed in the most natural manner.

ALCOHOLIC HEREDITY IN DISEASES OF CHILDREN.

Read in the Section of Diseases of Children at the Forty-first Annual Meeting of the American Medical Association, at Nashville, Tenn., May, 1890.

BY T. D. CROTHERS, M.D.,
OF HARTFORD, CONN.

A. B. came under my care for home treatment for periodic inebriety. He has used wine on the table at meals for twenty years; for ten years past he had drank in paroxysms. His wife used wine on the table also, and during pregnancy and lactation had used both beer and wine freely. He had two children, one a girl of eight years, the other a boy five years old, both invalids, and had been under constant medical care from infancy, the general diagnosis being scrofula and general

anæmia; and both were of pale and delicate appearance, extremely excitable and nervous.

They had continuous irritation of the stomach, from an unrestricted diet of all kinds of foods and drinks, except wine and beer; were very passionate at the slightest opposition to their wishes, and after a period of rage would be greatly exhausted and have a distinct fever for a day or more. The girl had attacks of emotional religiosity, in which she manifested great sorrow and melancholy at her sins, and asked the prayers of all persons she came in contact with; at other times she was precociously bright, and irritable at any opposition to her wishes.

The family physician had no faith in heredity, and treated these various conditions as so many symptoms of threatened organic disorders which his skill and remedies prevented from gaining farther. Both had suffered from rubeola and scarlatina, and were supposed to have never fully recovered. Bronchitis, enteritis, gastritis, neuritis, and various heart diseases, were constantly threatening, and as constantly averted. Finally, death of the physician brought a new man who recognized the alcoholic heredity of these cases, and ordered them to the country where the diet was restricted, and enforced exercise outdoors, and frequent bathing when it could be carried out.

These children had marked nerve and brain instability, with low vitality, and were neurotics, which would of necessity develop insanity, inebriety, or any other form of nerve and brain degeneration; and the rational treatment should have recognized this condition, and given special attention to the diet and surroundings, and the avoidance of all existing causes that would stimulate the brain and nervous system.

A physician wrote me that he had given tincture cinchona to a neurotic child of one year of age, for slight fever which resembled malaria. In a short time the child would cry for the medicine, and only would be satisfied for a little time after it was given; on one occasion it took at once a two-ounce mixture of this drug. He changed to other tonics, but found that nothing would satisfy the child but tinctures. The child was found to have an alcoholic mother, who died soon after its birth, and the alcohol in the tinctures aroused an organic memory which had been inherited.

In private practice, some years ago, I treated a little boy for over five years, for the most confusing and varied disorders and diseases that it was possible to have; he recovered from one disorder only to be prostrated with another. None of them were well defined or clear, and much difference of opinion prevailed among the numerous medical men who were called in consultation. At puberty this boy became a pronounced dipsomaniac, suddenly, and without any special temptation. Years after he came under my care, and

was a chronic case. From a study of his history it was ascertained that his father was an inebriate, and died before he was born. Here was an alcoholic heredity, which had escaped notice; and where the alcoholic neurotic symptoms were not understood.

I think we may confidently expect of the practice of medicine, that in the near future such cases will be treated so successfully that the alcoholic or insane predisposition will be warded off. I have heard of numerous instances of children from infancy upward to puberty, upon which alcohol in any form and in small quantities acted as a hypnotic; in some cases no other medicine could be tolerated, and in some alcoholic heredity was present, and in others it was not clear.

In the study of the early history of inebriates, a great variety of diseases common to childhood appear, and seem to have been more intense than in other children. Such cases seem to have suffered more severely than others from nutrient disorders, shocks, and traumatism; they are freighted with some heredity or predisposition to particular forms of degeneration; the organism has received a certain bias, from which it cannot escape. Alcohol, of all other drugs, seems most potent to impress cell growth and function.

No fact is more firmly established than that alcoholic ancestors will transmit to their children a defective brain and nerve power. The form and shape of this defect and its manifestations will vary widely.

In many cases it may not be prominent until after the higher peripheral brain has reached a certain development, especially in the growth of the emotional and inhibitory centers. In others this defect is seen in infancy, in an abnormal hyperæsthesia of the senses, and nutrient disturbances. Some children manifest irritation at all sounds, and all changes of light and surroundings, by continuous crying; the skin or alimentary canal is also very sensitive, and various skin disorders and nutrient troubles follow. Low powers of vitality and slow, irregular growth are common. This condition may continue for years, then gradually disappear, and only re-appear at puberty, or later, in some distinct form of degeneration. Sometimes a marked neurasthenia and anæmia appear in early life and continue up to puberty, then break out into some disease, or develop some hereditary malady.

Another class of children are noted, who come from alcoholic ancestors, by their precocious development of brain and nerve force. They exhibit powers of brain receptivity and instability that is called genius, which give way early to some disease or form of nerve degeneration from various causes. Inebriety, insanity, or both, are very common sequels. Alcohol or opium in any form is almost always a grateful remedy, and is demanded in many instances by the patient. The

use of bitters that contain large quantities of spirits is also very popular, and an unconscious organic memory is awakened that rarely dies out.

In some children this craving for spirits is manifest very early. A case of this kind was brought to my notice by Dr. Smith, of New York, where an infant of two months old could only be quieted by a few drops of spirits. Its taste was so pronounced that it would stop nursing at the sight of the person who gave the spirits, and cry until it was gratified. Fortunately, such instances are not common; but the abnormal tastes of children, and their extreme sensitiveness or obtuseness to sensory impressions, and low powers of vitality and recuperation, are often clear symptoms of an alcoholic impression from ancestors.

This alcoholic heredity will be seen in children that manifest extremes of activity, particularly where there is a tendency to the sudden liberation of nerve energies, as in violent passion (grief or joy) or work, play, or study, which is followed by extreme prostration. The child is said to be sullen, morose, or melancholy, then suddenly manifests the other extremes, indicating a great instability of brain cells and functional control. Its life seems to be threatened with fevers, prostrations, and inanitions, accompanied with mental irritations and wandering neuralgias that tax severely the skill of the physician. These conditions may follow other heredities, but they always point to a degree of nerve and brain degeneration or retarded development, and defective co-ordination, that must be recognized in the treatment.

In all cases where alcoholic ancestors, even back to the second generation, can be traced, there are certain predispositions which must be considered in the treatment.

First. A tendency to exhaustion from feeble vitality, and low power of restoration. Tonics and nutriments that have a direct stimulant action on the brain should not be used, such as alcohol and opium, and meat broths. These remedies have a tendency to still further exhaust the vital forces, paralyzing the nerve centers and increasing the carbonaceous matters of the system.

Second. An instability of cell and nerve function, and strong predisposition to develop into some particular form of degeneration, which is practically an exhaustion of the higher brain centers with craving for relief. All stimulants and remedies which act on the brain centers increase the existing degeneration.

Third. There is a special affinity for all nerve stimulants by those higher brain centers. Their use constantly interferes with the natural development of brain energy from food. Thus, alcohol, tea, coffee, and other substances have a peculiar delusive effect.

From these facts it will be obvious that the diseases of children of alcoholic parentage are far more complex, and require greater care. In ad-

dition to whatever disease they suffer from, there is always neuræsthenia and defective control of the brain centers, which may come into prominence at any moment, from causes both known and unknown. This hereditary bias and neurotic instability enters into all cases.

The general principles which should govern in the treatment may be grouped as follows: 1. No form of alcohols are safe, and narcotics of all kinds should be used with great care. 2. The diet should not include meats of any kind, because of their stimulating character; while meats contain much food force, they act as stimulants to a brain already over-stimulated and exhausted, and increase the peril of nervous disease. The pathological tendency of all these cases is to become alcohol-takers and meat-eaters, hence the diet should always be non-stimulating and farinaceous, and should be carried out with military regularity. 3. The hygienic treatment is also of the greatest importance; every means and measure which can build up a system, and avoid brain and nerve stimulation, is required. 4. Cases of this character should be guarded against every possible extreme, both in the surroundings and physical conditions that are under the control of the physician. The tendency of all energy and nerve force is to pass off in explosions, which should be counteracted; the diseases they suffer from show this tendency to concentrate and become intensified in certain directions, also to manifest distinct exacerbations. Finally, the fact of an alcoholic heredity in disease of children that we are called upon to treat, gives a wider therapeutical range of possibilities, both in direct and preventive medicine.

Recent studies of alcohol cases show that over seventy per cent. are directly inherited. If this is confirmed by later studies, the treatment of inebriety will in the future begin in infancy, and the higher science and art of medicine will win its greatest triumphs along the line of prevention.

SURGERY OF THE SUPERIOR LARYNGEAL NERVE IN SPASMODIC DISEASE OF THE LARYNX.

Read in the Section of Laryngology and Otology at the Forty-first Annual Meeting of the American Medical Association, Nashville, Tenn., May, 1890.

BY J. P. CREVELING, M.D.,
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The operation of which I am about to speak is one, as far as I know, new in surgery of the larynx, and one of sufficient severity to preclude its performance except in very rare cases where all other means afford no relief, and when the disease is sufficiently severe, as to render the life of the patient so uncomfortable that any procedure, however grave, if it presents even a prospective chance for relief, becomes justifiable and proper.

It will be seen later on that the merit of the operation is based on the result of two cases only, one of which was seriously complicated. It will also be seen that in the first instance the manifestation of the laryngeal disturbance was not confined to that organ alone but reflected to the lungs, producing asthmatic breathing, not very severe, but enough to give annoyance and excite apprehension.

It was not for this disease, however, that advice was sought, but for one of a much more serious nature; one for which no less severe measures could be adopted. It was in this case that I first noticed the result in the larynx of dividing the superior laryngeal nerve. I did not observe the extreme liability of food to pass into the larynx that I had feared, and therefore was less timid to attempt a similar operation for a purely laryngeal trouble of a less formidable character.

In brief I will give the history of the two cases:

Case 1.—M. C., a female, aged 30, consulted me in September, 1888, for a large irregular tumor situated in the base of the posterior triangle of the right side of the neck, and difficult or asthmatic breathing. The tumor extended down under the muscles toward the median line and rested against the trachea. Examination with the laryngoscope disclosed a tumified and engorged condition of the laryngeal mucous membrane, extending into the pharynx. The epiglottis alone remained normal.

I attributed the throat disease, as well as the asthmatic attacks, to pressure of the tumor, and proceeded to operate without unnecessary delay. The base of the growth proved to be large and nodular, pressing firmly against the trachea and adherent to the carotid capsule. It was quite easily detached from the trachea but it was necessary to remove an inch or more of the capsule of the artery. After the removal was completed the wound was closed, which healed kindly, but neither the breathing nor the laryngeal condition were benefited. She declined throat treatment and all other remedies calculated to relieve the disturbed respiration, because she had anticipated a cure with the removal of the tumor.

In about six months she again presented herself with a growth in the posterior part of the upper triangle of the right side of the neck, and one in the upper half of the anterior triangle of the left side also, extending from the angle of the inferior maxillary down along the side of the thyroid cartilage. In extirpating this last mentioned one it became necessary to divide the superior laryngeal nerve. After recovering consciousness it was observed that she was extremely hoarse, and deglutition somewhat embarrassed, but the difficult breathing had been overcome. From this time on she had no more trouble in that direction. It took a long while for the hoarseness to entirely pass away, and in fact the for-