

malleolus is prominent and gives an appearance of enlargement, and is lower than normal. There are a number of scars on the foot as a result of the former operation, one running down the inner side of the foot across tibial tendons. There is practically no power in tibials. Antero-posterior motion is fair. Lateral motion is restricted.

It was decided to manipulate the foot under an anesthetic and to correct the deformity. This was done; the foot was put up in plaster of Paris for two months, and was then given a brace. At that time the position was good and ankle motions were fair. The patient then went to his home.

The author did not think it advisable at that time to perform a more radical operation as the patient was still growing, but told the father that a more radical operation would probably be necessary. It is interesting to note in this case the small amount of pain and apparent disability which allowed the use of the leg a week after the injury.

THE HYGIENIC AND DIETETIC TREATMENT OF DELICATE CHILDREN BY THE CLASS METHOD. (ABSTRACT.) *

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THE problem of the treatment of delicate children is not a simple one. Its solution depends upon finding the causes of the condition. Heredity cannot always be blamed, because most delicate children were normal and healthy infants. If the child does not improve under our care, it is safe to say that we have not carried our investigations far enough. The belief that adequate causes can always be found by looking thoroughly into every detail of the child's life should mark the beginning of success in its treatment. Acting upon this supposition, the writer in the fall of 1908 collected into a class, fifteen of the weakest and most poorly nourished children from the four or five thousand patients coming to the Children's Department of the Boston Dispensary.

First. The past record of each child was considered carefully. A new and complete physical examination was made. The child's diet and home conditions were investigated, by giving each child a small record book to be brought in at the next visit. The child or parent was directed to keep a complete record of everything the child ate or drank for the following forty-eight hours. The time spent in sleep, out of doors, the exact number of minutes at meals, and such details as seemed necessary in each particular case, were considered.

Second. A social visitor was sent to the house, where she filled out a special card giving all the essential details in the child's home surroundings.

Third. Another card was filled out in relation to the child's diet, habits at meals, its likes and dislikes as regards the chief articles of food. Based upon the data thus obtained, a talk was given the class as a whole, explaining hygiene and diet and the open-air treatment. A few food values were given. Positive directions were given rather than negative ones. The child was encouraged to substitute cocoa for tea and coffee, fruit for sweets and simple puddings for rich pies and cake. Hesitation

was felt in taking children into the class who had any functional or organic affections. It was found that such children gained as rapidly as the others. The class was held on Saturday mornings for one hour. As the child came in he was weighed and given a position in the class according to his gain or loss in weight. The weekly report books were examined. The visitor in charge of the patient made her report. Individual suggestions and directions were given. Where the child gained in weight little was said. If the child did not gain, a careful study was made to ascertain the reason, and almost without exception the reason was easily found. The other children and parents were sympathetic listeners, eager to know the cause of the child not gaining. The bringing out of practical points in this way constituted the most effective method of instruction. The analysis of the class records showed, as factors in their poor condition, adenoid growths in the nasopharynx, close relation to tuberculosis, frequent carious teeth, fickle likes and dislikes for food, rapid eating, the use of liquids to wash down the food, hygienic ignorance and lack of control on the part of the parents. It was found that if a child was absent for more than one week from the class he almost invariably lost in weight.

On June 1, there were six graduates from the class; that is, six children had gained normal weight and health. During the summer two more were added, making eight who had gained normal weight and health. The other seven were in excellent health and lacked but a few pounds or ounces of being normal in weight. Places were provided for all these children for summer outings and vacations; they were weighed again in the fall; their average monthly gain was less during the summer months than during the winter months when they were members of the class.

In the classes of 1908 and 1909 the average age on admission was eleven years. The average amount under weight was 12 lb. 3 oz. The largest amount under weight in any one child was 28½ lb. The average weekly gain was 6.6 oz. The largest average weekly gain in any one child was 8 oz.

The following were found to be the most important points in the treatment of these children by the class method:

PARENTS.

In the class method the parents observe and learn; their intelligent co-operation is secured; where the parents cannot come to the class, it is necessary that a social worker act *in loco parentis*, else the child does not gain.

WINDOW TENTS.

Window tents were used by about one half of the class. They serve a double purpose by giving fresh air to the children at night and also during the rest period in the day time, without cooling off the rest of the house. The mothers often use them and are benefited. Tents help utilize rooms not otherwise suitable for sleeping purposes. In stormy weather, or when the mother is unable

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to go out, the child can get its airing by the use of the window tent. The whole cost of the tent need not exceed two dollars. Those using tents gained on an average of 3.3 lb. more than those who did not use them.

DIET AND THE PROPER MASTICATION OF FOOD.

The dietary was based upon the forty-eight-hour list of food. Cereals were added and the diet balanced. The child was encouraged to take from three to six glasses of milk daily. The total food value was increased from an average of 1,200 calories per day to an average of 2,000 calories per day. Every possible means was used to get the child to eat slowly, in two cases it being necessary for the parent to feed the child with a spoon for short periods.

SCHOOLS.

Children attended school regularly. In a few cases it was necessary to take them out for a short time. They always gained immediately upon being taken out of school. The writer believes that there should be open-air schools for all delicate children. The establishment of such schools would mark a great step in advance in preventive medicine.

CONCLUSIONS.

The class method is particularly well adapted to the proper treatment of delicate children. The spirit of competition, the "game" in it, has a powerful attraction to the child, aiding greatly in his management and control.

The steady gain in weight in children following directions furnishes a strong incentive to the parents and the children alike.

The class method makes the necessary instruction of the parents easy and effective.

The results obtained each week remove prejudices and fears and convince in a moment, as if by magic, where hours spent in arguments fail.

In the giving of instructions and directions to the parents and the children assembled together there is an enormous saving of time.

The class method furnishes the best training school for the social worker. She can here learn what instructions are to be carried out; what the object sought. She catches the spirit of the work and is enabled to relieve the physician of a large mass of detail for which he has neither the time nor the energy to perform, and for which the social worker is the one person especially qualified by sex and training to carry out.

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THE PRESENCE OF AIR IN THE BLOOD VESSELS IN MEDICO-LEGAL AUTOPSIES.*

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Air may enter the circulation whenever a blood vessel, being opened by accident or design, makes a communication in the circulation between a

negative pressure in the blood vessel and the positive pressure of the surrounding air. In the arteries, the blood pressure precludes this possibility. In the veins, however, the natural flow of the venous blood makes a tendency for the vessel, when cut off from the blood circuit, to empty itself toward the heart. This fact, especially when the vessel belongs to one of the great cavities of the body, creates the conditions of negative pressure within itself and, if the vessel is in communication with the air, bubbles may enter and are carried to the heart and lungs.

The chief interest in this subject to the medical examiner rests in those cases where air enters the venous sinuses of the uterus, where the detachment of the placenta in the pregnant uterus opens venous trunks having a portion of their course in the abdominal cavity and air enters through the dilated or patulous os. This condition occurs almost always as a result of the working of the professional abortionist.

In the case which I wish to report, the bubbles of air or gas did not come from any attempt at producing abortion and show at least the possibility of air appearing in the circulation through the uterine sinuses as a result of practices not connected with the production of abortion.

M. P., twenty-nine years old, a married woman, but at the time of death separated from her husband, the mother of three children, the youngest five years old, met by appointment on an evening in May her paramour and went with him to a lonely spot in the woods, where they indulged in sexual intercourse. Immediately after the act, the woman stood up, exclaimed, "Oh, my God, my head," and fell into her lover's arms unconscious. There was no convulsive effort. The man summoned a physician, who found the woman dead. The autopsy was made about twelve hours after death. Inspection of the body showed the presence of bits of dead twigs and pine needles pressed against the skin of the buttocks and a few pieces on the pubic region. About the vaginal orifice was a small quantity of dried dark-colored blood, and some fluid blood of dark color was seen on dilating the vagina. There was a slight tumefaction of the lower abdominal region. On opening the pulmonary artery *in situ*, there escaped blood thickly mixed with bubbles of air or gas. These bubbles were found also in the right side of the heart, which was dilated, and in the large venous vessels of the thorax and abdomen. The brain and meninges were normal. The uterus were found enlarged to a point about half way between the pubic bone and the umbilicus. It contained a perfectly formed male fetus nine inches long in unruptured membranes. The placenta was separated from the uterine walls in its lower segment over an area of about three or four square inches. The os was partially dilated.

The evidence showed that the lover had knowledge of the woman's condition and that she was anxious to rid herself of the fetus and had approached a physician, a man of good repute, who had refused to aid her in this direction. There was no evidence of instrumental attempt at producing abortion.

This woman, although separated from her husband, was not legally divorced and the act of sexual connection was an adulterous act and the

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