

DIABETES IN CHILDREN*

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Tice states in his *Practice of Medicine* that it is now generally admitted dietetic therapy and the use of insulin are the only means by which we can combat diabetes mellitus. This is a rather pathetic admission, considering the well-known fact that the mortality rate is greater today than in pre-insulin days, as borne out by the following statistics from Tice's own *Practice of Medicine*.

Diabetes mortality is rising rapidly throughout the civilized world. In the United States the death rate per 100,000 was 11.0 in 1900, and 22.0 in 1932 ; there were 26,298 recorded diabetes deaths in 1932 ; in 1932, diabetes ranked as the ninth most common cause of death in the United States and, disregarding deaths from accidents and congenital conditions in the new-born, diabetes advances from ninth to seventh in rank. Diabetes mortality is greatest in the United States. (Vol. IX, p. 870)

Diabetes is more fatal in childhood. It might be well to state here, however, that there has been an increase in life expectancy of from 55 to 59.8.

Tice's statement that the only combative means are dietetic therapy and the use of insulin is a sad commentary on the failure of the homoeopathic school to make known its mortality rate to the regular school of medicine.

My paper deals only with the homoeopathic treatment and dietetic management of diabetes mellitus, touching on diagnosis and etiology only as these subjects bear on the homoeopathic treatment and dietetics.

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DIAGNOSIS

Diagnosis is at present mostly a laboratory procedure.

HYPOGLYCEMIA AND HYPERGLYCEMIA

Two conditions must be clearly understood in guiding us in dietetic management, as well as homoeopathic therapy.

HYPOGLYCEMIA

First—*hypoglycemia*, which is a sugar content of the blood below 0.080. When the blood sugar level drops to such an extent that symptoms ensue, the hypoglycemia shock, insulin shock or insulin reaction is used to describe the condition.

The earliest manifestations of hypoglycemia are paresthesias, tingling and numbness about lips and finger tips, excessive hunger, followed by sweating, skin is pale, pupils dilated, and the patient complains of headaches. The pulse is full and bounding ; gradually the patient loses muscular tone, complains of double vision, and maybe strabismus. There may be hemiplegia. The patient lapses into unconsciousness, or, more rarely, becomes excited and unmanageable.

HYPERGLYCEMIA

Second—*hyperglycemia*, which exists when the blood sugar is at a level of 170 m.g. per 100 cc. or higher. This causes the following symptoms : Polyuria, polydipsia, inordinate appetite, especially for sweets, high blood sugar, emaciation, sweetish odor of the breath and, finally, coma.

DIFFERENTIATION BETWEEN HYPOGLYCEMIA COMA AND HYPERGLYCEMIA COMA

It now becomes essential to differentiate clearly between coma produced by *hypoglycemia* and coma produced by *hyperglycemia*.

In 1931 Doctor Priscilla White (physician at the New England Deaconess Hospital at Boston, Mass.) in her book entitled *Diabetes in Childhood and Adolescence* records two deaths in children directly attributed to *hypoglycemia*, wrongly

treated as if it were diabetic coma. The most important clinical signs are :

1. *Rapid* loss of consciousness in hypoglycemia, or insulin shock ; the *gradual* loss of consciousness in diabetic coma.

2. The cause of insulin shock is an *increase* in hypoglycemia, or insulin shock, reduction of the diet, or an increase in exercise ; while the cause of diabetic coma is the *omission* of insulin, lapse of dietary control, or an infection.

3. The skin in hypoglycemia, or insulin shock, is moist and pale ; in diabetic coma the skin is dry and flushed, except in the late stages when there is pallor.

4. The breathing is normal or shallow in hypoglycemia, or insulin shock ; while it is hyperpnoic in diabetic coma.

5. The pulse in hypoglycemia, or insulin shock, is full and bounding, in spite of the appearance of collapse ; the pulse in diabetic coma is weak and rapid.

6. Vomiting is exceptional in hypoglycemia, or insulin shock, and when it occurs usually *follows* unconsciousness ; vomiting is the rule in diabetic coma and *precedes* unconsciousness.

7. Convulsions are the rule in hypoglycemia, or insulin shock ; while convulsions occur in diabetic coma only when the patient has received alkalis.

8. Finally, examination of the urine : In hypoglycemia, or insulin shock, this will be found to be negative for sugar ; while in diabetic coma the sugar content will be found high.

CARE OF DIABETIC CHILD

The care of the diabetic child resolves itself mainly into three factors :

First : the maintenance of the normal physiological processes of the growing and developing organism.

Second : the prevention of accidents of diabetes ; and

Third : the eventual production of an individual who will be an economic and social asset.

The child must have adequate nourishment, blood sugar below 200 m.g., glycosuria less than 10 Gm. in 24 hours, and cholesterol content of the blood below 230 m.g.

DIATETICS

Most authorities are giving much less restricted diets to children than a decade ago.

Practical type regulation has been taken for the diabetic child's diet, which I have copied directly from Dr. Priscilla White's book. This seems to be a most practical application of dietetic principles.

Age	No. of Cases	C.	P.	F.	Cal.	Wt. kg.	Cal. per kg.
1	1	72	39	47	867	8	108
2	5	78	41	69	1097	15	72
3	12	71	43	63	1023	14	72
4	20	81	47	69	1133	16	70
5	24	90	50	74	1226	16	76
6	13	103	57	76	1324	19	69
7	8	93	56	93	1433	18	72
8	8	109	57	84	1420	21	82
9	12	92	61	90	1422	25	64
10	13	116	59	89	1501	28	53
11	14	108	65	95	1547	29	53
12	14	109	68	110	1698	34	49
13	16	106	69	108	1672	37	43
14	18	119	73	115	1803	43	40
15	14	108	76	129	1897	45	40

Caloric requirement cannot be arbitrarily fixed by the age of the patient, as each child will have to be individualized on the basis of relative metabolic efficiency, activity, height and weight. Caloric intake must be increased 5 to 10 per cent every six months to produce a normal increase in height of about 2 inches, and in weight of about 6 pounds.

The diabetic child should never be restricted as to exercise and should be allowed to work and play with his normal brothers and sisters. This will more readily enable him to build up a greater carbohydrate assimilation, which should be increased as rapidly as tolerance permits.

HOMOEOPATHIC TREATMENT

Statistics of homoeopathic treatment, as compared to the regular school treatment, will show the same greatly reduced mortality as proven in many other chronic diseases. The results of my personal experience in treating diabetic patients with homoeopathic remedies has been far superior to the usual insulin treatment. Most of the patients coming to me have become discouraged from the hopeless outlook of a life of insulin administration. Complete examination has been made with careful recording of the symptoms, and this is followed by repertorial work. The remedies described below are a few of the most important, although any remedy which proves to be the similar drug may cure the patient. Case taking is begun with the mental symptoms, followed by a complete examination of all objective and subjective conditions. It has not been practical nor possible to immediately discontinue insulin, but the dose has been decreased each week as the homoeopathic remedy takes hold until insulin is entirely eliminated. The time necessary for insulin elimination has varied from a few weeks to several months. Patients bring weekly reports of glycosuria which have been made daily. Blood sugar reports are recorded every thirty to sixty days.

HOMOEOPATHIC REMEDIES

ACETIC ACID

This drug produces a condition of profound anaemia, great debility, profuse urination and sweat, dyspnoea. Especially indicated in pale, lean persons, with lax, flabby muscles.

FACE : pale, waxen, emaciated.

STOMACH : salivation. Fermentation in stomach. Intense burning thirst. Cold drinks distress. Vomits after every kind of

food. Epigastric tenderness. Burning pain as of an ulcer. Sour belching. Burning waterbrash and profuse salivation. Hyperchlorhydria. *Violent burning pain in stomach and chest, followed by coldness of skin and cold sweat on forehead.* Stomach feels as if she had taken a lot of vinegar.

URINE : Large quantities of pale urine ; with great thirst and debility.

ARGENTUM NITRICUM

Very characteristic is the *great desire for sweets.*

STOMACH : belching accompanies most gastric ailments. Nausea, retching, vomiting of glairy mucus ; burning and constriction ; trembling and throbbing in stomach. Enormous distention. Desire for cheese and salt.

MODALITIES : Worse, warmth in any form ; at night ; from cold food ; sweets ; after eating ; at menstrual period ; from emotions ; left side. Better, from eructation ; fresh air ; cold ; pressure.

CHIONANTHUS

MOUTH : dry sensation not relieved by water, also profuse saliva.

ABDOMEN AND LIVER : aching in umbilical region, griping. Reels as if a string were tied in a "slip-knot" around intestines which was suddenly drawn tight and then gradually loosened. Sore ; *enlarged, with jaundice* and constipation. Clay-colored stool ; also soft, yellow and pasty. Tongue heavily coated. No appetite. Hepatic region tender. Pancreatic disease and other glandular disorders.

URINE : large amount of high specific gravity ; frequent urination ; bile and sugar in urine. Urine very dark.

PHOSPHORICUM ACIDUM

The common acid "debility" is very marked in this remedy, producing a nervous exhaustion. *Mental debility* first ; later physical. A congenial soil for the action of *Phos. acid* is found

in young people who grow rapidly, and who are overtaxed, mentally or physically. Whenever the system has been exposed to the ravages of acute disease, excesses, grief, loss of vital fluids, we obtain conditions calling for it. Pyrosis, flatulence, diarrhoea, diabetes, rachitis and periosteal inflammation.

MIND : listless. Impaired memory. Apathetic indifferent. Cannot collect his thoughts or find the right word. Difficult comprehension. Effects of grief and mental shock. Delirium, with great stupefaction. Settled despair.

STOMACH : craves juicy things. Sour risings. Nausea, *Symptoms following sour food and drink*. Pressure as from a weight, with sleepiness after eating. *Thirst for cold milk*.

URINE : frequent, profuse, watery, *milky*. Micturition, preceded by anxiety and followed by burning. *Frequent urination at night*. Phosphaturia.

PHOSPHORUS

MIND : great lowness of spirits. Easily vexed. Fearfulness, as if something were creeping out of every corner. Clairvoyant state. Great tendency to start. Over-sensitive to external impressions. Loss of memory. Paralysis of the insane. Ecstasy, dread of death when alone. Brain feels tired. Insanity, with an exaggerated idea of one's own importance. Excitable, produces heat all over. Restless, fidgety. Hyposensitive, indifferent.

MOUTH : tongue dry, smooth, red or white. Thirst for very cold water.

STOMACH : hunger soon after eating. Sour taste and sour eructations after every meal. *Water is thrown up as soon as it gets warm in the stomach*.

I have had one striking cure with *Phosphorus* of a child eight years of age where the following symptoms were present : Restlessness, apprehensive, especially at night or in the dark ; desire for cold drinks and salty foods ; dry mouth ; hunger soon after eating. Her blood sugar and urine have been sugar-free for the past eight months. Insulin, while in use at the time the child was brought to my office, was discontinued within two months. There has been no further need for insulin.

SYZYGIUM JAMBOLANUM

Has an immediate effect of increasing the blood sugar, glycosuria results.

Great thirst, weakness, emaciation. Very large amount of urine, specific gravity high. Old ulcers of skin. Diabetic ulceration.

URANIUM NITRICUM

Causes glycosuria and increased urine. Its therapeutic keynote is great emaciation, debility and tendency to ascites and general dropsy.

URINARY : Copious urination. Diuresis. Incontinence of urine. Diabetes. Emaciation and tympanites. Burning in urethra, with very acid urine. Unable to retain urine without pain. Enuresis.

DIABETIC COMA

Very few diabetic children in my experience under homoeopathic treatment have reached the stage of coma. I have been forced in a number of cases to make use of insulin where I could get only meager description of conditions preceding coma and where no clear-cut indications for the indicated remedy were apparent, but *no insulin* should be administered unless the urinalysis shows the presence of sugar. I have given small doses beginning with 20 units, giving as high as 200 units, but it is better to give small doses of 20 units every half hour until there is a definite change in the blood picture and in the general condition of the patient.

A CO₂ estimation should be made. This often ranges as low as 30 while the blood sugar estimate will rise to 300 or more. Where coma exists as a result of hypoglycemia, intravenous glucose with normal saline is given as high as 3000 cc., maintaining 20 per cent glucose. A Rehfus tube is passed through the nose into the duodenum and through this tube fluids can be injected or removed.

The homoeopathic remedies most useful in diabetic coma are :

BELLADONNA

Hot, dry face ; sweats on covered parts only ; dry, red face ; restlessness, throbbing carotids ; dilated pupils, dry mouth. A good picture of dehydration.

HELLBORUS

Involuntary stool and urine ; wrinkled forehead ; cold sweat, rolls head from side to side ; bores head into pillow ; automatic action of one leg and arm.

HYOSCYAMUS

Low muttering delirium ; carphologia ; deep stupor ; pupils dilated, eyes open ; tongue dry, cracked and stiff ; involuntary stool and urine.

MURIATIC ACID

Loud moaning ; fetid breath ; involuntary stool and urine, slides down in bed ; rapid, feeble pulse, intermits every third beat.

CUPRUM METALLICUM

Convulsions begin with twitching in individual groups of muscles, gradually deepening into coma. Protrusion and retraction of tongue. Cyanosis.

OPIUM

Deep coma. Dark red discoloration of the face. Sterterous breathing. Dry, black tongue. Contracted pupils. Delirious muttering with eyes open.

CONCLUSION

Homoeopathic treatment of diabetes is at present the most effective treatment, with a lower mortality rate than other methods. Insulin is of no value except as an emergency measure, supplying a deficiency only. Homoeopathic remedies will do much to stimulate reconstruction of the isles of Langerhans. Careful history taking and repertorial work will bring about startling results, for which you will be well repaid in the number of cures made possible, and in the everlasting gratitude of your patients.

Seattle, Wash.

[*Courtesy : The Homoeopathic Recorder, Dec., 1936*]

