Gigantism—A Suspected Case

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The basis of much popular psychology today is the formation of certain impressions gained about children and adults from their general physical appearance. The child who towers above all the others of his own age always attracts attention. The person who is slightly taller than average probably enjoys a certain feeling of physical superiority with a slight advantage in his favor. When an individual is extremely tall, he often has feelings of inferiority because he does not conform to the average or normal group.

Today, I wish to report a suspected case of one of the rarer types of psychological deviation—gigantism, sometimes called giantism. This condition is the result of the hyperactivity of the anterior lobe of the hypophysis during pre-adulthood; when the hyperactivity occurs in the adult, however, the condition is usually known as acromegaly.

There has not been much research on this particular handicap. For some reason we seem to have more abnormally small people than we have abnormally large. At least, we recognize the former more readily and write about them oftener.

Furthermore, doctors, particularly those who are familiar with endocrinology only in a cursory way, have a tendency to chalk up the ex-
cessive poundage to overeating. For example, a fourteen-year-old girl weighed 265 pounds. Her physician, in discussing the case, casually dismissed it by saying that she simply ate too much. He gave her a diet, and told her mother to bring her back in three months. It is hard to believe that mere dieting will bring her weight in line with that of normal fourteen-year-olds.

A third reason is that gigantism, unless it is extreme, is often shrugged off with a “He certainly has big feet!” or a “Well, all her people are big. Look at her aunt!”

Barbara was born in North Carolina, October 4, 1938, of normal parents. The prenatal period and circumstances of her birth were free from any unusual conditions. In fact, the mother was under the care of a physician during the entire pregnancy. Barbara was weaned at ten months; her first tooth appeared at four months; she walked at 15½ months; and she talked at 13¼ months. She was able to dress herself at 4½ years.

Although Barbara was apparently normal at birth, she has shown signs of gigantism—large body, hands, and feet—from early childhood. When she entered school, at the age of six, she weighed 150 pounds, and wore an adult shoe, size 6½. Her weight at age 7—167; 8—172; 9—185; 10—200; 11 yrs 10 mos—225; 12—240 (October 4, 1950); 12 yrs 5 mos.—240 (March, 1961). Her height in July, 1950, was 5’11½; in March, 1951, she was an even six feet. She wears a size 20 dress and size 14 shoes.

Barbara has defective vision that necessitates the use of glasses. She also has a speech impediment, which is not exactly a lisp, but might be described as “thick-tongued”. Other than one streptococcic infection, she has had no serious illness. She is right-handed, has flat feet, and has a tendency to work her fingers and to “twitch about”. She entered puberty at 11 years, 5 months.

Emotional problems developed early. Her teachers have agreed that she is extremely nervous, shy, and tends to elate and to effervescence. Barbara seems to have a normal attachment to her parents, but she is afraid of the dark, unless one of her parents is with her. Socially, she has been quite successful in group attachments. She makes friends easily, both with her peers and with her non-peers.

Although Barbara is overgrown, she seeks children of her own age for playmates. The results are often incongruous. The children like to play house, and since Barbara is large, she usually is cast in the role of mother. She is frequently seen carrying “her children” in their play.

Her wide circle of friends seems to stem from her protective ability—either real or imaginary. In the class room, she is usually selected by her peers as the leader; this honor, she always accepts.

Barbara daydreams, not excessively, but more than might be considered desirable from the viewpoint of a mental hygienist. On the other hand, she likes to play the piano, to read, and to cut out paper dolls. This last pastime is a part of a pattern of homemaking and family life that characterizes many of her leisure time activities.

As an only child, Barbara is indulged by her parents. She does very much as she pleases with no responsibilities placed on her. However, she is well-mannered in school, which she attends regularly, and is cooperative with her teachers and other adults.

Barbara’s appetite is enormous, but it might be quantitatively in keeping with her size and age. A typical lunch menu for a week is as follows:
ACADEMY OF SCIENCE FOR 1951

**MONDAY**
2 cups of greens
1 Milky Way
1 soda pop
4 biscuits

**TUESDAY**
3 cups dry beans
6 pieces of bread
¼ of a cake
4 ham sandwiches

**WEDNESDAY**
4 cheese and ham sandwiches
1 five cent cake
1 soda pop

**THURSDAY**
3 meat sandwiches
a five cent cake
1 soda pop

**FRIDAY**
4 ham sandwiches
cake, candy
do pop

**SATURDAY**
2 hamburgers
4 slices of bread

**SUNDAY**
Chicken, pastry, pork chops, bread, cake

Although there is a hot lunch program at the school, she eats at home. This typical diet reveals her parents' indulgence. It will be noted that only once did she eat a green vegetable; and salads, milk, and fruits were omitted entirely.

Barbara comes from a typical progressive farm family. Both her parents are 31 years old and have finished the eighth grade. They seem to be fairly well-adjusted socially and emotionally. Their economic status is very good; they own their farm and their home; they raise food, money crops; and they are good providers.

Her intellectual development has been in keeping with her early psychological progress in that her I.Q. (98) indicates average intelligence. She began reading at 5½ years of age, entered school at the age of six, and has kept up to the level of her grades with no difficulty. She is now in the eighth grade.

The subject has made above average grades—all "A's" and "B's" since she first entered school. She has received more "B's" during the last school year, however. Her mother has been seriously ill, which seemingly has affected her emotionally. Also, since she is of average intelligence, the work probably is becoming more difficult for her.

She has taken a liking to the boys, and has recently become quite genteel, whereas last year she was much a tom-boy. She wears skirts and blouses, uses much lipstick, and is always neatly attired. She has now another interest—playing basket-ball, which she does very well. Barbara attends church regularly, whether from goodness or from personal admiration of the young minister we don’t know, but probably the latter.

The county visiting nurse feels that Barbara needs to be under the care of a specialist. The county physician, who is also the school physician, stated (when she entered school) that something would be done for her when she reached the age of 11. So far, nothing has been done to correct the disturbance. The lack of medical treatment, unfortunately, may have shortened Barbara’s life span considerably. For some reason, victims of pre-adult glandular hyperactivity seldom live much beyond the adolescent period. It is anybody’s guess as to whether she has reached her full development or whether during adolescence she will enter a new growth cycle.

The nurse further admits that there is a nerve disorder. The presence of the latter is especially significant, for there is a history of mental illness in the family which is summarised as follows:
The paternal grandmother has

1 sister who has been a patient in the North Carolina State Psychopathic Hospital three times—each period was of several months duration. (Celebrated 60th wedding anniversary in 1950.)

1 brother who died at the psychopathic hospital.

2 sons (including Barbara's father) who were patients there; one died some time ago.

1 nephew (her sister's son) who is currently a patient there.

1 nephew who has, for two years, shown signs of depression or melancholia. However, he seems to have snapped out of his condition—temporarily at least. He says that he was "hexed". A quack doctor gave him some liquid to take and told him that he would be all right. That broke the "hex". This nephew has a daughter who was born during the mental disturbance, and is abnormally small.

1 daughter who has had some form of mental sickness. For more than a year she had withdrawn from society, sought no companions, never went out, hid when guests arrived. She too, however, seems to be getting back to reality, although her activities are confined entirely to religion.

Barbara's father was treated at the hospital for several months. Domestic trouble caused him to "just crack". After the family counseled with his wife (Barbara's mother) and carried her to see him, he began improving. He is now apparently normal, goes about his business efficiently, and is active in community affairs.

If we allow the hypothesis that there is interdependence of glandular activity and the central nervous system, then we may state that the functional imbalance of one gland induced by environmental stimuli would secondarily affect others. Thus it would seem that any or all body functions which are normally in any way influenced by an endocrine gland might be altered by the right stimulus.

Barbara was not an abnormal baby at birth. The hyperpituitarism in Barbara's growth must be the result of environmental influences. Therefore we may venture a guess—perhaps even a hypothesis—that Barbara has a mental disorder which is hereditary; however, the disturbance, because of environmental influences, has manifested itself in the hyperactivity of the pituitary gland.