Of course it is open to us to consider this a case of ordinary chronic chorea, but there are some points that suggest the possibility of a more serious disease which was described by Dr. Wilson in *Brain*\(^1\) under the title of "Progressive Lenticular Degeneration." In this there is bilateral softening of the lenticular nuclei combined with cirrhosis of the liver, the latter giving no clinical signs during life. The points of resemblance are the facial expression resembling the "spastic smile" described by Dr. Wilson; the tremors of the limbs and their long duration. On the contrary, except perhaps in the face, there is no spasticity at present.

DISCUSSION.

Dr. Milner Burgess: Is there any explanation of the stillbirths in this family; also has anti-syphilitic treatment been tried for this patient?

Dr. F. Parkes Weber: The head of this patient seems to me to have a slightly hydrocephalic appearance.

The Chairman (Dr. Leonard Guthrie): Dr. Parkinson is not here, so he cannot now answer the questions put. I think the case must have changed considerably in character since the notes printed were taken. It is difficult to make out now that she has marked tremors of any kind, or attheros. The child seems to me to be mentally defective, slightly at any rate. Her manner of speaking is that of a much younger child. And I fail to see, at present, any evidence of the progressive lenticular degeneration with hepatic cirrhosis, to which Dr. Parkinson draws attention. I think we must wait for further developments before deciding on that diagnosis.

*(February 23, 1917.)*

Case of Precocious Sexual Development.

By T. R. Whipham, M.D.

The patient is a boy, aged 5 years 11 months, who is remarkably big for his age and presents an adult sexual development. His height and weight are those of an average boy, aged 11 or 12 years, but his muscular and general development give him the appearance of an even greater age. There are five other children in the family, three older and two younger, who are all normal; no deaths, no miscarriages. The parents are normal, and, if anything, inclined to be small, the
father being 5 ft. 8 in. in height, and the mother 5 ft. 2 in. The only history of any possible abnormality in the family is that the patient's great-great-grandfather is said to have been "a very big, powerful man."

The boy was born at full term, and weighed 8 lb. at birth. He cut his first tooth at the age of 8 or 9 months and walked at the age of 16 months. During the first year he was breast-fed. The first signs of abnormal development were noticed when he was aged 16 months, and at 2½ years he weighed over 4 st. His present height is 4 ft. 4½ in., and his weight 5 st. 6 lb. The circumference of his head is 21¾ in., and that of his neck 13¾ in. His chest measures 26½-28½ in., abdomen 23 in., biceps 8½ in., thigh 16 in. There is slight down on the upper lip and
very slight down on the chin. Around the nipples and on the chest there is a slight hirsuties, but on the back it is more marked. Axillary hair is present, and there is a profuse growth on the pubes. The penis and testes are remarkably developed and of adult dimensions. The boy is strong and his muscles generally are large and firm, like a man's, and he speaks with a deep voice. He has recently begun school life, and is, naturally, at present in the infants' class. He appears to be of average intelligence, but in many ways his capabilities are more than are usually found in children of the same age. For instance he dresses himself, even putting on his collar and tie, and cleans his own boots. He can peel potatoes, sweep the floor, and wash up the tea things and put them away; he can also be trusted on errands, but he does not as yet know the value of money. He holds his own with other boys older than himself, and is said to eat "as much as a man." By nature he is sensitive, especially as regards his size and development. So far as can be ascertained, he has not hitherto exhibited any knowledge of sex or sexual tendencies. His general health is good, the only illness that he has had being measles when a baby.

DISCUSSION.

Dr. Whipham: The patient shows great muscular development and not obesity, as in similar conditions is not infrequently seen in girls. Notwithstanding his physique the boy still presents some of the characteristics of childhood. The head is large; the limbs are short in comparison with the trunk; and the mid-point of the total height is 1½ in. above the pubis. No obvious lesion has been found to account for the condition. A skigram of the skull shows no enlargement of the sella turcica, and I suggest the existence of a suprarenal tumour, probably of the nature of a hypernephroma. Cases such as this raise the interesting question as to the time of onset of the sexual instinct and its cause. If that instinct arises at the time of puberty as the result possibly of the internal secretion of the testes, is this boy likely soon to evince a knowledge of sex? He has erections, but apparently not emissions.

Dr. Harry Campbell: Some years ago I had a case which was almost an exact counterpart of this, showing that it belongs to a distinct type. I understand that this boy's premature sexual development began at the age of 18 months: in my case it began at the age of 2 years. With regard to the question of sexual instinct, I imagine this boy has got the normal sexual-instinct of a boy at puberty, though it may not have revealed itself yet. In my case the sexual instinct was fully developed. The great muscular development is very interesting. It shows that the stimulus of the secretion of the testes or associated glands has an influence on the development of
the muscles, because this boy’s muscles have developed out of all proportion
the exercise to which they have been put. Another interesting feature is the
absence of cutaneous fat referred to by Dr. Whipham. This is a peculiarity
of the katabolic male, as contrasted with the anabolic female. The male tends
to get thinner, if anything, after puberty, whereas the female tends to lay on fat
at that time. In reference to my patient’s mental state, I take it that it is yet
too early to express an opinion. The boy I had under my care was a semi-
idiot. With regard to the legs, my case showed bowing of the femora, but in
this case it is difficult to judge of the condition of those bones by ordinary
inspection, on account of the great development of the vasti.

Dr. J. D. Rolleston: It would be interesting to know what is the blood-
pressure in this case. In the last case of sexual precocity shown before the
Section, by Dr. E. C. Williams, of Bristol, the systolic blood-pressure of
the patient, a boy aged 6 years, was almost that of an adult—110 mm.

The Chairman (Dr. Guthrie): The most important thing to decide is
whether this is really morbid, or whether conditions such as this may be
simply normal abnormalities. Dr. Whipham has suggested that this condition
of sexual precocity may be due to an adrenal tumour. I think he also mentioned
that in such cases obesity only occurs in the female. That is not quite correct.
Dr. Parkes Weber originally pointed out that there are two types of precocity
in these cases of adrenal tumour. One is the infant Hercules type, such as
the present case, and the other is the obese. This last type may occur as
much in one sex as in the other. I have recorded the case of a boy who was
enormously stout and heavy. He had a suprarenal tumour. But I am not
certain that all these cases are due to suprarenal tumours. Out of thirty-five
cases in boys, the notes of which I collected at one time, only four had
suprarenal tumours: three of those four were of the Hercules type, and one of
the obese. I think there is no doubt, as Dr. Whipham contends, these cases
are measures of the secretory activity of, probably, the adrenal glands: but
I am not certain that that activity is always morbid. I think that by the
time some of these children reach the age of puberty they are no longer
wonders, and that is so, I think, in both sexes. Of 100 cases in females, there
were only twelve with hypernephroma or adrenal tumour. Other causes of
this precocity may be tumours of the testicle, for instance. Sacchi reported
the case of a boy who had a tumour of one testicle and showed all the
signs of sex precocity. On removal of the testicle those signs disappeared.
Dr. Whipham asked an interesting question, as to the development of the
sexual instinct, whether it occurs when the organs are mature. I have always
understood that there is no rule in these matters, and that certain persons,
although sexually mature, never develop the instinct at all, that the develop-
ment is rather due to tuition than to instinct. It would be very interesting if
these cases could be followed up, so as to find out what becomes of them.

I have a strong impression that many after a certain age, in both sexes, cease to be wonders, and are regarded as ordinary members of society.

Dr. F. Parkes Weber: This is a typical case of what we (in this Section) have mostly called the "infant Hercules" type of precocious bodily development. In regard to the question of prognosis and progress in such cases, I would suggest that Mr. Hugh Lett and any other members of the Section, who have shown cases of this type before this Society, or before the old "Society for the Study of Disease in Children," be asked to furnish, as far as they can, a report of the subsequent history of their cases.

(February 23, 1917.)

Case of Fragilitas Ossium.

By T. R. Whipham, M.D.

The patient is a boy, aged 9 years, who all his life has been liable to fractures of the bones from trivial causes. The first fractures occurred when he was five weeks old, both femora being then broken. Subsequently he has fractured the right leg twice, and the right forearm, and quite recently has sustained a fracture of the lower jaw as the result of a fall. He presents marked deformities of the lower limbs, but manages to get about with the help of crutches. His health is good, and he is said never to be ill. He has five brothers and sisters, who are all normal, and there is no history of any similar condition in the family.

DISCUSSION.

Mr. Paul Bernard Roth: With regard to the treatment of this condition, my experience has been that no fractures occur after puberty has been reached. The way to treat these cases is to put the legs straight, and there is no surgical reason for not doing so: they should be put and kept in splints until the child is 14 or 15 years of age, after which it is very unlikely that fractures will occur. I have seen several cases which have been operated upon. Union did take place in them, and the resulting condition, though not beautiful, was perfectly satisfactory.

Dr. Eric Pritchard: Some years ago I had a case of the same character, in which there was an ununited fracture. Sir William Arbuthnot Lane wired it with success, and it did very well. I attributed much of the improvement to the systematic massage and the passive muscular exercises which were given to this child. This boy had had many fractures before of the legs and other