ON
A CASE
OF
PREMATURE PUBERTY.

BY
ROBERT BATH SMART, M.R.C.S.

(*Communicated by* RICHARD QUAIN, F.R.S..)

Received June 21st.—Read June 22d, 1858.

I DESIRE to place on record a case of premature puberty which has recently come under my notice. That the relation of this case to others may be more readily apprehended, I have prefixed a brief reference to the examples of this condition already published in this country.

The earliest instance of premature puberty which I have been able to find in an English volume is in the 'Philosophical Transactions' for 1745, where there are two letters, entitled "Some Account of the Gigantic Boy at Willingham, near Cambridge." This child, named Thomas Hale, was born Oct. 31, 1741; he was a lusty boy at birth, and the parts of generation were remarkably large. The minister of the parish writes:—"He grew to admiration three quarters of a year, having only the breast sustenance, when his mother died suddenly, and, as is supposed, he was accessory thereunto, by drawing away her vital nourishment." The change of diet, consequent on his mother's death, had no retarding influence on his growth, as he continued to flourish amazingly, and, when he was two years and ten months old, Mr. Dawkes, surgeon, at Huntingdon,

communicated the particulars of his case to Dr. Mead. At this time, he was three feet eight inches and a-half high, and weighed, in his clothes, four stone two pounds. He possessed extraordinary strength, and could easily lift and throw from him a blacksmith's hammer, which weighed seventeen pounds. When provoked by other children, he did not fight with his fists and legs, but laid his opponent prostrate by sheer strength, treating thus even boys of eight or ten years of age. His voice was "like a man's very groom." The genital organs were of large size, and the pubes covered with long thick and crisp hair. "The lanugo first appeared when he was near a year old, which gave great uneasiness to his parents."

This case was considered at the time so incredible, that the surgeon, before submitting his statement to the Royal Society, thought it advisable to confirm its veracity with affidavits from the midwife and the churchwardens of the parish.

Twelve other examples of premature puberty in both sexes have since been published in this country, and references are to be found, in our medical literature, to other instances, recorded by foreign authors. The following table exhibits the cases alluded to:—

Title of Work.	Author's Name.	Sex of Child.		Age at which Menses first appeared.
		Males Five.	Females Eight.	
Phil. Trans., Vol. 43, 1745	Dr. Mead	1		
Med. Chir. Trans., Vol. 1, p. 277	Mr. Anthony White	1		
" " " " 2, " 17	Mr. Cooke		1	never menstruated.
" " " " 2, " 116	Dr. Martin Wall		1	9 months.
" " " " 4, " 204	Sir Astley Cooper		1	3 years.
" " " " 11, " 446	Dr. Gilbert Breschet	1		
" " " " 12, " 76	Mr. South	1		
Med. and Phys. Journ., Vol. 25, p. 117	Dr. Cookson		1	3½ years.
Midland Med. Reporter, Vol. 1, p. 137	Dr. Burne	1		
Med. Gazette, 1832, p. 9	Dr. Ledseau		1	3 years.
" " " 1840, p. 548	Dr. Peacock		1	nearly 5 years.
North. Journ. Med., 1845, p. 70	Mr. Whitmore		1	few days.
Taylor's Med. Jurisp.	Mr. Embling		1	2 years.
Lancet, 1848, p. 137				

The child who is the subject of this paper first came under my observation in August last, when she presented the same remarkable features as those which now distinguish her. No detailed examination, however, was made until the present month, May, 1858.

Mary Deane, aged five years and four months, was born on January 7th, 1853, at Lombard Street, Deansgate, and has lived in Manchester all her life. The exact date of her birth has been ascertained from the Register.

She is of a robust habit; her complexion is clear, rosy, and slightly inclined to be fair; she has grey eyes, and rather dark brown hair; her height is three feet seven inches, and she weighs, in her clothes, fifty-two pounds and a-half.

It will be seen, from the accompanying photographs, that her general appearance is wonderfully like that of an adult female, of short stature, and the resemblance is maintained in her functional economy, the menses recurring every month, as regularly as in their normal manifestation. The configuration and relative proportions of the torso differ widely from the type of childhood. The subcutaneous cellular tissue is abundantly supplied with fat, by which the unseemly angularities of unripe years are cushioned over and lost in the rounded contour of maturity.

There is nothing unusual in the volume or shape of her head, neither inspection nor mensuration discloses any indication of cerebellar enlargement. The hair of the poll is not more abundant than in other children of her age. Her countenance has a childish expression; the teeth all belong to the first or "milk" set.

A trifling peculiarity is observed about the left eye, which cannot be opened so wide as its fellow, causing an appearance of partial ptosis. This is owing to a curtailment of the palpebral fissure at the outer canthus, which is probably a congenital malformation, as the mother says it was always so: there is no decided mark of a cicatrix, nor do the cilia

extend beyond the present commissure, as might be expected in anchylo-blepharon from ophthalmia tarsi.

The throat is full, but the thyroid cartilage is not particularly prominent. The voice is strong, without any other peculiarity.

The bust is full and womanly, as is well seen in the photographs. The breasts are larger and more protuberant than those of most girls who have recently attained puberty, and the characteristic lobular structure of the gland is easily perceived on manipulation. The nipples are well developed, and the integument of the breasts is traversed by the branching blue lines of the enlarged mammary veins, which it is said become especially apparent at the catamenial periods. The axillæ are destitute of hairs.

The child is wider across the hips than others of her age. The prominence of the nates and the forward curve of the lumbar spine are well marked, and there is a corresponding excess in the bulging of the abdomen. The pubes is sprinkled over with fine light-brown hair, about an inch in length; the mons veneris is prominent. The labia externa and nymphæ are large, the latter included within the fissure of the vulva. The vagina is capacious, and has a fringe-shaped hymen.

The limbs are stout and muscular, the thighs, especially, being very fat and large; the bones are straight and strong. The contrast to the more slender limbs of her elder sister is extremely striking.

The intellectual and moral faculties of this child do not exhibit any signs of precocity at all commensurate with the forward development of the body. Her disposition is lively, but her mother says she has "her little tempers," in which she shows an obstinate resistance to authority, and she is less manageable than her sisters. She is certainly less intelligent than her elder sister; her education, however, has been neglected entirely, her mother being unwilling to send the child to school, lest tricks might be played with her. There are no positive indications of sexual propensities; she is coarse in her manners; but, perhaps, not more so than

other children of her class and age; there is an absence of all that grace and gentleness which accompany natural puberty in the female sex. She is not at all shame-faced; she does not shrink from being examined, nor does she blush when stripped; she has manifested no preference for the society of the opposite sex, indeed, she is reported to avoid the company of boys. Her mother describes her as being "old-fashioned in her ways," as being fond of babies and household employments, and as liking dress and display, loving to strut in some tawdry drapery hung fantastically from her shoulders.

Previous History.—According to the statement of the mother, she was a rather large child at birth, but presented no indication of the remarkable development so soon to follow. The head had very little hair upon it, and the fontanelles were open, remaining unclosed till she was nearly eighteen months old. Her first tooth appeared at the end of nine months, and she had entered upon her third year before the set was completed. She did not go alone until she was sixteen months old.

She escaped all the more serious disorders incident to dentition. She never had convulsions, nor had she ever chorea or any other symptom of spinal irritation or cerebral disease. She had measles, and afterwards scarlatina; the latter, when she was about two years of age. She has never had worms.

An inquiry into her habits does not reveal an exposure to any of the assigned exciting causes of early puberty. She has occupied the same bedroom as her parents, and has never slept with any of the other sex; her sisters have been her usual associates. In diet she has fared like the rest of the family.¹

¹ The effect of diet on sexual development is shown in certain of the lower animals. The "neuter" larva of the bee is changed into a perfect female or "queen" by superior aliment alone.

The earliest phenomenon of sexual development observed by the mother was a slight down on the pubes, which was discovered a few weeks before the menstrual discharge. The catamenia made their first appearance when the child was three years and six months of age; for six months before their occurrence she seemed to be the subject of some inward ailment, and the mother feared "she was going in a low way." The child was weak and inert; she did not care to play with other children, but moped indoors. She was heavy and drowsy, but did not complain of headache. She used sometimes to suffer from pains in the back and groins, not over the hypogastrium. For some months she had a leucorrhœal discharge.

The first menstrual flow lasted about a week, and was very thick and black. It has returned regularly every month since, once only it was delayed for six weeks. The catamenia, which are now natural in quality, but not much in amount, generally last four days, sometimes a day more or less. At these periods she used to wear a napkin, but now refuses to do so, and her linen has been observed by me to be stained in consequence. There is often an appearance of "whites" a few days before the eruption of the catamenia, and, at such times, she complains of aching in her back and belly.

After the establishment of the catamenia she rapidly gained in flesh, and has since been hearty and well. She has never been given to fainting fits, or any other form of hysteria.

History of Family.—The mother of this child will be aged twenty-six next July. She is a small, spare brunette, and was formerly a factory-hand. She began to menstruate at the age of sixteen, and was married in two years after. She has had four children, all of whom are girls, and are still living. The first-born, Jane, aged seven on the 24th March last. The second, Mary, is the subject of this narrative. The third is aged three years and a half, and the youngest sixteen months. The mother is conscious of being

subjected to no extraordinary influence during her second pregnancy. The labour was tedious, but, in other respects, natural. There is nothing remarkable in the appearance of Mary's sisters; Jane, the eldest, is thin and darker, resembling her mother; although Mary's senior, she is below her in stature, and weighs nearly a stone less.

The father, æt. 26, is of light complexion, and of medium height; he is a "maker-up" in a warehouse. It has not been ascertained at what age he acquired virility.

No example of sexual precocity has been known to occur in the ancestry, or in any collateral branch of the family.

TABLE OF MEASUREMENTS.

	MARY DEANE,	JANE DEANE,
Age	5 yrs. & 4 mo.	7 years.
Weight	52½ lbs. avoird.	40½ lbs. avoird.
Height	43 inches	42 inches.
From root of nose over vertex to occipital protuberance	12½ "	12½ "
Between meatus auditorii ext. across vertex ...	13½ "	12½ "
From occipital protuberance to mid-point on circumference of a vertical plane passing through meatus auditorii	6½ "	6½ "
From root of nose to same point as above ...	6½ "	5½ "
Circumference of cranium above orbits ...	20 "	20 "
Half circumference in front of meatus auditorii	9½ "	9½ "
Ditto behind meatus auditorii ...	10½ "	10½ "
From symphysis to angle of lower jaw ...	3½ "	3½ "
Circumference of throat opposite thyroid cartilage	10½ "	9½ "
Circumference of shoulders	26 "	24½ "
From most projecting point of shoulder to the other, before	12 "	11 "
Ditto ditto behind ...	14 "	13½ "
Circumference of thorax opposite nipples ...	25½ "	21 "
Ditto ditto at scrobiculus cordis ...	22½ "	20 "
Ditto of abdomen opposite umbilicus ...	25½ "	20 "
Ditto of hips over buttocks ...	25½ "	21½ "
From ant. sup. spin. process of ilium to opposite ditto, measured over the protuberant hypogastrium	7 "	6 "
Ditto estimated callipers-fashion ...	6 "	
From ant. sup. spin. process of ilium to opposite ditto, passing horizontally backwards ...	15½ "	13 "
From ant. sup. spine of ilium to symphysis pubis	4½ "	4 "
From symphysis pubis under perineum as far as point of spine on level with topmost crests of ilia	12 "	10 "
Between great trochanters, (callipers fashion) ...	8½ "	8 "
Circumference of thigh at widest part ...	15 "	12½ "
From great trochanter to sole of foot (standing)	21 "	20 "
Length of foot	6½ "	6½ "

In the preceding measurements the elder sister has served as a convenient standard of comparison. The differences observable between the two children are most emphatic, where the data relate to girth, and are chiefly due to the greater volume of the soft parts in the younger girl, and less to the expansion of the osseous framework. The most practical importance is attached to the determination of the pelvic diameters, which do not, however, seem to be notably increased.