

Supplementary Table S1 Characteristics of patients with DP.

	CDGP		PHH		FHH		Hyper H	
	Male (n = 142)	Female (n = 39)	Male (n = 13)	Female (n = 6)	Male (n = 16)	Female (n = 14)	Male (n = 3)	Female (n = 11)
Family history of DP, %	63 (n = 90)	69 (n = 27)	31 (n = 4)	67 (n = 4)	38 (n = 6)	42 (n = 6)	0	27 (n = 3)
The mother	40 (n = 36)	41 (n = 11)	50 (n = 2)	75 (n = 3)	50 (n = 3)	33 (n = 2)		67 (n = 2)
The father	23 (n = 21)	7 (n = 2)	0	0	0	17 (n = 1)		0
Both parents	19 (n = 16)	15 (n = 4)	25 (n = 1)	0	17 (n = 1)	33 (n = 2)		33 (n = 1)
A sibling	4 (n = 4)	4 (n = 1)	0	0	17 (n = 1)	0		0
Parent(s) and a sibling	14 (n = 13)	33 (n = 9)	25 (n = 1)	25 (n = 1)	16 (n = 1)	17 (n = 1)		0
A history of cryptorchidism, %	2 (n = 3)	NA	31 (n = 4)	NA	0	NA	0	NA
Age at diagnosis, yr	15.0 (0.6) (n = 142)	13.9 (0.9) (n = 39)	15.5 (1.0) (n = 13)	15.6 (1.2) (n = 6)	15.1 (0.6) (n = 16)	14.6 (1.2) (n = 14)	16.3 (1.4) (n = 3)	14.4 (1.1) (n = 11)
Age at the beginning of Rx, yr	15.1 (0.7) (n = 106)	14.2 (0.7) (n = 12)	15.5 (1.0) (n = 12)	16 (1.2) (n = 5)	15.5 (0.5) (n = 10)	15.3 (0.8) (n = 8)	15.7 (0.1) (n = 2)	14.4 (1.0) (n = 8)
ISO-BMI, kg/m ²	22.6 (5.5) (n = 110)	20.3 (4.3) (n = 36)	25.6 (6.0) (n = 7)	17.3 (1.4) (n = 5)	16.8 (2.8) (n = 10)	18.4 (4.5) (n = 11)	19.4 (3.5) (n = 2)	21.6 (2.1) (n = 10)
Growth velocity, cm/yr	4.1 (1.7) (n = 134)	3.2 (1.5) (n = 39)	3.5 (0.8) (n = 11)	2.3 (1.3) (n = 6)	3.2 (1.3) (n = 13)	3.0 (1.8) (n = 13)	2.9 (2.5) (n = 3)	2.7 (1.0) (n = 11)
Height at diagnosis, SDS	-1.2 (0.9) (n = 137)	-2.0 (1.2) (n = 39)	-0.8 (0.8) (n = 13)	-2.0 (1.4) (n = 6)	-1.6 (1.1) (n = 15)	-2.4 (1.6) (n = 13)	-1.4 (1.2) (n = 3)	-2.1 (1.5) (n = 11)
Mid-parental target height, SDS ^a	-0.1 (0.6) (n = 132)	-0.3 (0.8) (n = 35)	-0.1 (0.6) (n = 11)	-0.1 (0.9) (n = 5)	0.1 (0.6) (n = 14)	-0.1 (0.7) (n = 10)	-0.7 (0.4) (n = 2)	-0.1 (0.7) (n = 10)
Delay in bone age, yr	-2.1 (0.8) (n = 132)	-2.3 (0.9) (n = 39)	-2.1 (1.0) (n = 8)	-2.9 (1.5) (n = 6)	-2.2 (0.9) (n = 14)	-2.8 (0.9) (n = 13)	-0.5 (2.2) (n = 3)	-2.6 (1.2) (n = 11)
Age at Tanner stage G1/B1, yr	14.6 (0.5) (n = 65)	13.6 (0.6) (n = 33)	15.3 (1.0) (n = 11)	15.3 (0.8) (n = 5)	15.0 (0.8) (n = 10)	14.4 (1.2) (n = 10)	16.9 (1.5) (n = 2)	14.3 (1.0) (n = 10)

^aTarget height standard deviation score (SDS) was calculated using the formula: $0.886 \times ((\text{father's height} + \text{mother's height})/2 + 6.8 - 178.9066)/6.6784 - 0.071$ (Saari et al., 2011).

Data are percentage or mean (SD).

CDGP, constitutional delay of growth and puberty; PHH, permanent hypogonadotropic hypogonadism; FHH, functional hypogonadotropic hypogonadism; Hyper H, hypergonadotropic hypogonadism; DP, delayed puberty; Rx; hormonal treatment.