

TABLE E-1 Distribution of Children in Different Body Habitus Percentile Groups

Percentile Groups (2000 NCHS percentiles ²⁹)	Birth Weight ²⁷	Height at Diagnosis of the 1st Slipped Capital Femoral Epiphysis	Weight at Diagnosis of the 1st Slipped Capital Femoral Epiphysis	Body Mass Index at Diagnosis of the 1st Slipped Capital Femoral Epiphysis
>90th	5	2	8	9
75th to 90th	5	2	1	3
25th to 74th	7	10	12	6
10th to 24th	1	3	0	2
<10th	1	3	1	0
Total	19	20	22	20

The sum totals do not equal 25 as a result of missing data in the medical records of the 25 Amish children with slipped capital femoral epiphysis.

TABLE E-2 Comparison Between Unilateral and Bilateral Slipped Capital Femoral Epiphysis in 25 Amish Children

Parameter	All	Unilateral (n = 17)	Bilateral (n = 8)	p value
Age at Diagnosis (yrs)	13.4 ± 1.6	13.6 ± 1.4	12.6 ± 1.8	0.67
Gender (M/F)	17/8	11/6	6/2	1.00
Symptom Duration (mos)	6.6 ± 9.0	7.6 ± 11.6	6.1 ± 5.1	0.74
Presentation (Ac/Ch)	2/26	1/15	1/11	0.83
Presentation (St/Unst)	31/2	16/1	15/1	1.00
Birth Weight (kg)	3.7 ± 0.5	3.7 ± 0.5	3.8 ± 0.6	0.60
Weight at Dx (kg)	55.6 ± 12.4	60.1 ± 12.4	47.8 ± 7.6	0.026
Height at Dx (cm)	155.5 ± 10.2	153.4 ± 9.0	160.4 ± 12.0	0.11
Body Mass Index at Dx (kg/m ²)	23.4 ± 5.4	25.1 ± 5.6	19.6 ± 2.5	0.032
Oxford Bone Age Score	32.8 ± 3.6	33.6 ± 3.5	30.8 ± 3.1	0.014
Oxford Bone Age (yrs)	14.3 ± 1.1	14.4 ± 1.1	13.8 ± 1.0	0.20
Slip Angle (deg)	38 ± 20	37 ± 14	49 ± 25	0.18
Mild/Moderate/Severe	7/11/5	4/2/4	3/9/1	0.047
Family History of slipped capital femoral epiphysis (Y/N)	9/14	5/10	4/4	0.66

M = male, F = female, Ac = acute, Ch = chronic, St = stable, Unst = unstable, Y = yes, N = no.

TABLE E-3 Previous Studies of Slipped Capital Femoral Epiphysis and Genetics

Study	Year	Type of Series	Number of cases	% familial incidence	Postulated inheritance	HLA Type
Rennie ⁴⁵	1967	Case reports	12 children, 8 different families	7%	Recessive with low penetrance	Not available at that time
Rennie ³³	1982	Retrospective review	214	14.5% 18.8% for osteoarthritis	Autosomal dominant with variable penetrance	Not done
Häggglund et al. ³²	1986	Consecutive case series	50 (40 families)	8.8% in 1st degree relatives	-	Not done
Häggglund and Hansson ⁴²	1986	Case report, 3 generations	3 cases, 1 family	-	Autosomal dominant with variable penetrance	Not done
Gajraj ⁴⁶	1986	Case report, identical twins	1 family, identical twins	-	-	A11, B12
Montsko and de Jonge ⁴⁴	1995	Case report	1 family, father and 5 siblings (3 M, 2 F)	-	-	Not done
Moreira et al. ⁴³	1998	Case report	1 family, 4 cases	-	Autosomal dominant	Not done
Diwan et al. ⁴¹	1998	Case report	1 family, 2 generations	-	-	Not done
Bednarz and Stanitski ⁴⁰	1998	Case report	Identical twins	-		Twin 1: A2,26, B51,60, Bw4/6 Twin 2: A2,24, B51/60, Bw4/6
Allen and Calvert ³⁹	1990	Case report	Identical twins	-	-	A2, B12
Günel and Ates ⁴⁷	1997	Case series	6 patients	-	-	DR4 common to all; no other common phenotypes
Wong-Chung et al. ⁴⁸	2000	Random case series	7 cases (6 M, 1 F)	2 were brothers	-	No common phenotypes