

FREQUENCY AND SEX DISTRIBUTION OF CONGENITAL DISLOCATION OF THE HIP AMONG BREECH PRESENTATIONS

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During the nineteenth century it was widely believed that congenital dislocation of the hip was due to injury in association with delivery. It was claimed to be most common among breech presentations and was then ascribed to the manipulations of the obstetrician or midwife.

In an attempt to disprove this assumption *Adams* (1885) published statistics in which he showed that only 7 (15 %) out of 45 infants with dislocation of the hip were breech presentations. But this percentage is higher than what might be expected. In large series the normal frequency of breech presentations is about 3.0 %. The next to study the frequency of breech presentations among children with congenital dislocation of the hip was *Delanglade* (1896). His series consisted of 112 cases with 8 breech presentations. This was more than twice the expected number. In 1905 *Vogel* gave a corresponding frequency of 25 % for a series of about 200 children with the disease. He did not give exact figures. This is a remarkably high frequency, but seems to have received but little attention and it is only mentioned parenthetically in *Lorenz's* (1920) monograph on congenital dislocation of the hip.

The first really large series was published by *Isigkeit* in 1928. On the basis of 1785 questionnaires that had been duly filled in and returned he found that 181 (10.2 %) of the children with congenital dislocation of the hip had been breech presentations. Since then several similar series have been published (Table 1).

In a personal series of 36 children with congenital dislocation of the hip diagnosed immediately after birth 11 (4 of 7 boys and 7 of 29

girls) had been delivered in breech presentation. The frequency of breech presentations was 2.6 %.

In large series the congenital dislocation of the hip is 5–6 times more common among females than among males. Thus *Poli* (1937) gave a ratio of 5.7:1, and *Idelberger* (1951), 5.4:1.

TABLE 1
Frequency of breech presentations in congenital dislocation of the hip.

		Total
<i>Adams</i> , London 1885	7	45
<i>Delanglade</i> , Paris 1896	8	112
<i>Vogel</i> , Bonn 1905	25 %	ca. 200
<i>Isigkeit</i> , Sachsen 1928	181	1785
<i>Hoof</i> , München 1928	10	66
<i>Scaglietti</i> , Bologna 1932.....	207	2876
<i>Poli</i> , Milano 1937.....	274	7454
<i>Francillon</i> , Zürich 1937	7	196
<i>Marx</i> , Charkov 1938	11 %	
<i>Kichelhayn</i> , Dresden 1938	same as Vogel	
<i>Bauer</i> , Berlin 1940	22	116
<i>Storch</i> , Berlin 1940	20 %	
<i>v. Haberler</i> , Wien 1945	18	60
<i>Klopfcr</i> , Erlangen 1950	3	10
<i>Czermak</i> , Wien 1952	22	69
<i>Müller & Seddon</i> , London 1953.....	40	95
<i>Nyström & Zilliacus</i> , Helsingfors 1956	20	164
<i>Drescher</i> , Würzburg 1957	19	123
<i>Record & Edwards</i> , Birmingham 1958	27	161
<i>Smith & coll.</i> , Ohio 1959	23	90

TABLE 2
*Sex distribution of congenital dislocation of the hip
among breech presentations.*

	Female	Male	Total
<i>Delanglade</i> , Paris 1896	6	2	8
<i>Hoof</i> , München 1928.....	17	8	25
<i>Czermak</i> , Wien 1952	18	4	22
<i>Nyström & Zilliacus</i> , Helsingfors 1956	13	7	20
<i>Drescher</i> , Würzburg 1957	10	9	19
<i>Record & Edwards</i> , Birmingham 1958	17	10	27
Malmö material 1960	7	4	11
Total ...	88	44	132

The sex distribution of congenital dislocation of the hip among breech presentations has only been studied in few and small series

(Table 2). In practically all collections the ratio between males and females with congenital dislocation of the hip in association with breech presentation is only twice as common among females as among males.

It seems that *Record & Edwards* (1958) are the only investigators who have noticed that the sex distribution of congenital dislocation of the hip among breech presentations differs from that among other presentations. They reported breech presentations among 43 % of the boys and among 12 % of the girls in their series of congenital dislocation of the hip. They stated that "the difference between these proportions is much too large to be reasonably attributed to chance", but they offered no explanation for this difference.

It has been discussed whether the dislocation or breech presentation should be regarded as primary, and reasonable arguments have been put forward for both possibilities. Since the dislocation is demonstrable at birth and since the primary cause is elongation of the capsule of the joint, it may be assumed that the breech presentation with long upward pressure against the trochanter is a contributory cause of the elongation of the capsule. Since breech presentations are equally common in both sexes (*Westman* 1931) and since dislocation is about 10 times as common among breech presentations, this difference in the sex distribution supports the view that breech presentation is a strong contributory cause of the dislocation. If congenital dislocation of the hip were the cause of breech presentation, the sex frequency should be the same as among cephalic presentations.

S U M M A R Y

A survey is given of the frequencies reported for breech presentations in congenital dislocation of the hip.

Congenital dislocation of the hip is about six times as common among females as among males, but among breech presentations with congenital dislocation of the hip females are only twice as common as males.

R E S U M E

Il est donné un aperçu de la fréquence rapportée des luxations en arrière dans la dislocation congénitale de la hanche.

La dislocation congénitale de la hanche est à peu près six fois plus commune chez les filles que chez les garçons, mais chez les filles les

luxations en arrière avec dislocation congénitale de la hanche sont seulement deux fois plus courantes que chez les garçons.

ZUSAMMENFASSUNG

Eine Übersicht der Häufigkeit von Steisslagen im Zusammenhang mit angeborener Hüftverrenkung wird gegeben.

Die angeborene Hüftverrenkung findet sich ungefähr sechsmal so häufig bei weiblichen als bei männlichen Kindern, aber unter Steissgeburten mit angeborener Hüftverrenkung ist die Anzahl der weiblichen Individuen nur zweimal so gross als die der männlichen.

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