



PUBERTY IN CHILDREN WITH SHUNTED CONGENITAL HYDROCEPHALUS WITH AND WITHOUT MYELOMENINGOCELE

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CONCLUSIONS

- All children with congenital shunted hydrocephalus, *with or without MMC*, are at high risk of developing E/PP
- In children without MMC the risk is comparable between the genders.
- In those with MMC the risk is most marked in girls
- The mechanism behind the later onset of puberty in boys with MMC should be further investigated

OBJECTIVE

To study the influence of MMC and gender on timing of puberty in children with increased intracranial pressure perinatally.

METHOD

All children with congenital hydrocephalus, born 1980 - 2002, treated with shunt and living in Uppsala county, were identified.

The cohort included 35 children (16 girls). Eighteen children (8 girls) had MMC.

Health records were examined retrospectively.

E/PP was defined as pubertal signs appearing before 9:2 years for girls and 10:2 years for boys.

BACKGROUND

Children with hydrocephalus and myelomeningocele (MMC) are at risk to develop early or precocious puberty (E/PP), which is strongly associated with increased intracranial pressure perinatally (1, 2).

It is also known that the occurrence of hydrocephalus without MMC is associated with risk of E/PP (3).

RESULTS

	Girls			Boys		
	<i>without MMC</i>	<i>with MMC</i>	<i>p</i>	<i>without MMC</i>	<i>with MMC</i>	<i>p</i>
Age start puberty (yrs)	8.4 +/- 2.0	8.3 +/-1.4	NS	8.5 +/-1.9	10.0 +/- 0.9	0.044
EP or PP	6/8 (75%)	7/8 (88 %)		6/9 (67%)	3/10 (30%)	

Table: Age at start of puberty and proportion of children with E/PP in the various groups

References

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