Cerebrospinal Fluid Research

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Oral presentation

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# Long term prognosis of fetal hydrocephalus

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*from* 49th Annual Meeting of the Society for Research into Hydrocephalus and Spina Bifida
Barcelona, Spain, 29 June – 2 July 2005

Published: 30 December 2005

*Cerebrospinal Fluid Research* 2005, **2**(Suppl 1):S12 doi:10.1186/1743-8454-2-S1-S12

## Background

In japan, 55% of the patients with congenital hydrocephalus are diagnosed prenatally as fetal ventriculomegaly, as result of advances in prenatal imaging techniques. However the clinical and ethical problems of fetal hydrocephalus continue to be unsolved. The aim of this paper is to clarify these problems.

## Materials and methods

forty three patients(25 males and 18 females) with fetal hydrocephalus underwent surgery from 1982 to 2005 in our department. The patients were classified based on the basic disease and associated anomaly.

## Results

The result of the classification were, 6 patients with simple hydrocephalus, 11 patients with myelomeningocele(MMC), 5 patients with X-linked hydrocephalus, a patient with Dandy-Walker syndrome, 4 patients with holoprosencephaly, 5 patients with encephalocele, 5 patients with arachnoid cysts, 2 patients with atresia of Monro's foramen, a patient with after hemorrhagic hydrocephalus, 3 patients with hydrocephalus accompanied with fetal brain tumors. The outcome showed a wide variation, with normal 19%, slightly delayed 16%, moderately delayed 16%, severely delayed 23% and peri and postnatal death 19%. This variation seems to be determined by the basic disease and associated anomaly.

## Conclusion

A guideline for the diagnosis and treatment of fetal hydrocephalus is urgently required, which should be based on the analysis of the clinical data of each disorders and critical appraisal of reviews. The number of adult patients with congenital hydrocephalus is now increasing. Therefore, the new issue of medical and social problems surrounding adult patients with congenital hydrocephalus should be discussed.