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= Abstract =

Four cases of *Candida* meningitis

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Candida meningitis is rare, but has been increasingly recognized in recent years. It can occur spontaneously, or as a complication of disseminated candidiasis, or as a complication of neurosurgery.

Records of all positive CSF cultures at the Yonsei University College of Medicine during the period of January 1993 to June 1998 were reviewed retrospectively. Four cases of *Candida* meningitis were encountered in a 5-year period. We describe four cases and review previous reports regarding *Candida* meningitis.

Three cases occurred in patients with shunts who underwent neurosurgical procedures. One case was identified as a complication of disseminated candidiasis in a low-birth-weight infant, that had been administered previous systemic broad spectrum antibiotics and intravenous hyperalimentation. (Korean J Med 59:550-554, 2000)

Key Words : *Candida*; Meningitis; Cerebrospinal fluid shunts

1970 가 가 . 1958 Utz 7) 26.
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• : 1999 10 14
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(ventriculo-peritoneal shunt)

1 : 18 가 38.5°C

4

(lumbo-peritoneal shunt)

8,390/mm³ 68.6%), 13.2 g/dL,

350,000/mm³ , 9.8 mg/dL, 4.6 mg/dL, 79 mg/dL ,

11.8 mg/dL, 0.5 mg/dL, 126 mg/dL, 6.8 g/dl, 4.3 g/dL, AST/ALT 8/6 IU/L, 0.6 mg/dL .

17 mg/dL, 160 mg/dL, 176/mm³ 68%, 32%)

Candida albicans(*C. albicans*)가

3 fluconazole(400 mg/day)

liposomal amphotericin B (1 mg/kg/day) 가 . 4

8 fluconazole 36.5°C

2 : 19 가 (endoscopic third ventriculostomy) 가

5

9,330/mm³ 75.6%), 10.9 g/dL,

Table 1. Four cases of candida meningitis

Case No	Age /Sex	Underlying Disease	Neurosurgical Procedure	Neurosurgical Device(duration)	Initial CSF Findings Sugar(mg/dl)/Protein (mg/dl)/WBC(/mm ³)	CSF Pathogen	Other Positive Culture	Anti-Fungal Therapy (dose/duration)	Shunt Removal	Final Outcome
1	18(years) /F	Cerebello- Pontine Angle tumor - knifesurgery	Tumor removal Shunt insertion	Previous lumbo-peritoneal shunt	17/160/176 (neutro 68%, lympho 32%)	<i>Candida albicans</i>	None	Fluconazole (400mg/56) +Liposomal Amphotericin B (50mg/28)		Resolution
2	19(months) /F	Tuberculosis meningitis Hydrocephalus	Shunt insertion	Ventriculo-peritoneal shunt(8 months)	24/66/820 (lympho 100%)	<i>Candida parapsilosis</i>	None	Flucytosine (1600mg/28) +Amphotericin B (2.5mg/28)	Done	Resolution
3	22(years) /M	Hydrocephalus	Shunt insertion	Ventriculo-peritoneal shunt(39 months)	53/36/75 (neutro 48%, lympho 52%)	<i>Candida parapsilosis</i>	None	Fluconazole (200mg/46)	Done	Resolution
4	6(days) /F	Prematurity	None	None	37/196/1150 (neutro 68%, lympho 32%)	<i>Candida albicans</i>	Urine:Candida albicans Vaginal swab : Candida albicans	Amphotericin B (1.4mg/50)		Death

CSF; Cerebrospinal fluid

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amphotericin B(0.5 mg/kg/day)
 flucytosine(75 mg/kg/day)
 7% 3 amphotericin B

13, 14.
 1 (4)
 1 (2)

9) Flucytosine
 17, 18.
 1 liposomal amphotericin B fluconazole
 , 2 3
 amphotericin B flucytosine, fluconazole
 28 , 46 , 50 , 56
 3

1, 14)
 50% 가 50%
 가
 가 1, 14) 1 가 가
 4 가 가 가 가 가 가
 가 가 가 가 가 가
 , 2 가 가 25% 1, 3.
 가 가 11%
 3 가 1), 3
 가 가 1

1950 amphotericin B, 1972 5- flucytosine
 2 가
 1/6 6.
 가 가 1, 11, 12) 가 가
 가 가 (biofilm)
 가 가
 4) 가 가 2
 1), 1 ,
 Amphotericin B 1
 11, 12)
 amphotericin B

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가
 12-14). fluconazole
 15) *Cryptococcus* spp.
 가
 11, 16, 17).

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