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= Abstract =

The Treatment of the Hip Fracture in the Dementia Patients

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Purpose: The goal of treatment in elderly patients with hip fractures is restoration of function to preoperative ambulatory status as early as possible. The dementia patients who live in the asylum for the old need longer rehabilitation program for restoration of function, especially walking ability. The authors compare the modalities of the treatment for the hip fracture in the view point of walking ability.

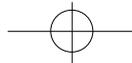
Materials and Methods: The twenty-eight dementia patients were operated due to hip fracture. Femur neck fractures were 7 cases, and femur intertrochanteric fractures were 21 cases. The authors analyze these patient on the recovery of walking ability. One patient who died immediately after operation was excluded in this study. The patients were divided into two groups. Of 27 patients, 13 patients were treated with osteosynthesis(Group I), and remaining 14 patients were treated with hemiarthroplasty(Group II).

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Results: Fixation loss was treated with hemiarthroplasty in two case of osteosynthesis. The dislocation was treated with open reduction in one case of hemiarthroplasty. In the group I, the walking abilities were significantly different between the preoperative (3.85) and the postoperative at 2 weeks(2.46), at 2 months(2.73) and at the final follow-up(2.55)($P < 0.05$). In the group II, the walking abilities were not significantly different between the preoperative (2.57) and the postoperative at 2 weeks(2.14), at 2 months(2.36) and at the final follow-up(2.29)($P > 0.05$).

Conclusion: Although there is no difference between two groups in final walking ability, The group treated with endoprosthesis showed earlier recovery of walking ability.

Key Words : Femur, Hip fracture, Dementia patients.

가 10 가 1 27 28 가 가 I , II (Table 1). Mini-Mental State Examination (MMSE-K) 가 76.4 (61 - 90) , I 75.2 (61 - 90) , II 78.7 (73 - 86) 가2 가25 7 , 2 ,5

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Table 1. The primary modality for the hip fracture

	Osteosynthesis	Hemiarthroplasty
Neck fracture	2	5
Trochanteric fracture	11	9

Table 2. The scale of the walking ability

6	Normal
5	Slight limp
4	Long distances with cane or crutch
3	Limited, less than one block
2	Indoors only
1	Bedridden

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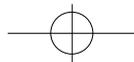
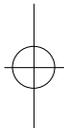


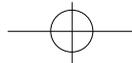
Table 3. The average walking ability

Group	Preop.	Postop.		
		2 wks.	2 mos.	Final
Osteosynthesis	3.85 (1.28)	2.46 (0.88)	2.73 (1.10)	2.55 (1.21)
Hemiarthroplaty	2.57 (1.22)	2.14 (0.66)	2.36 (1.15)	2.29 (1.20)
Total	3.19 (1.39)	2.30 (0.78)	2.52 (1.12)	2.40 (1.19)

* The number in the parenthesis is standard deviation.

20 , 11 I 14.4(S.D=3.8) , II
 , 9 13.6(S.D=4.2)
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 가 2 II 2.14 I 2.46 ,
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 2 , II 2.29 I 2.55 (Table 3).
 , I 2 (p<0.001) 2
 (p=0.002) (p<0.001)
 (compression hip screw) , II
 (p>0.05).
 , II
 Merle d'Aubigne and Postel 2 가 I
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 1 , I 2 (p<0.001) 2
 T-test (p=0.002) (p<0.001)
 , II
 (p>0.05).
 가3 II
 (I) 3.85 ,
 (II) 2.57 . 2 , 2 ,





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2 I II
2 2
2
(p>0.05).

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Table 4. The data of the walking ability

Group	Case No.	Sex	Age	Dx*	Preop.	2 wks.	2 mos.	1 yr	Final
Hemiarthroplasty	1	F	71	T	5	2	4		4
	2	M	75	T	2	1	1		1
	3	F	90	T	5	3	3	3	3
	4	F	74	T	5	4	4	4	4
	5	F	74	T	2	2	3	2	2
	6	F	61	T	4	3	3	1	1
	7	F	81	T	4	3	3		3
	8	F	78	N	3	2	2	2	2
	9	M	72	T	5	3	4	4	4
	10	F	73	T	3	2	2	2	2
	11	F	69	T	5	3	3	3	3
	12	F	73	T	5	3	3		3
	13	F	72	N	2	1	1		1
Hemiarthroplasty	14	F	77	N	1	2	1		1
	15	F	73	T	1	1	1		1
	16	F	82	N	5	3	5	5	5
	17	F	82	T	4	2	3	3	3
	18	F	86	T	2	2	1		1
	19	F	79	N	2	2	2	2	2
	20	F	79	T	2	2	2	1	1
	21	F	77	T	3	2	3	3	3
	22	F	81	F	3	3	3	3	3
	23	F	75	T	3	3	3	3	3
	24	F	80	N	2	3	3		3
	25	F	81	N	1	1	1		1
	26	F	73	F	3	2	2		2
	27	F	77	T	3	2	3		3

* T: trochanteric fracture, N: neck fracture, F: fixation failure

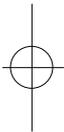
No. 14: Dislocation of the hip was developed, but was detected at postoperative 2 months. Dislocation of the hip was treated with open reduction, and the patient was bed-ridden. She died by sacral pressure sore at postoperative 5 months.

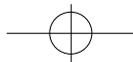
No. 15: The patient couldn't sit on wheel chair due to so much obesity. Early ambulation was not performed. She died by multiple pressure sore at postoperative 3 months.

No. 18: The patient died at postoperative 10 weeks by undefined cause.

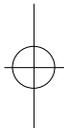
No. 19, 20 and excluded case: Intraoperative hypotension was developed due to PMMA monomer. Intensive care was need, and the excluded patient died.

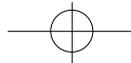
No. 22, 26: Conversional bipolar hemiarthroplasty was necessary due to fixation loss.





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가 3 39%
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Koval 6) ,가
가 2.9% ,
5.3% 2 가 5.4% 가





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