

1. 潜水事故の現状(沖縄)
2. 減圧障害(DCI)とは
3. 潜水の器材:最新の方法
4. 潜函(ケーソン)作業とは
5. 高気圧作業安全衛生規則の改正
6. DCIの治療:医療の現場から
- 7. DCIの治療:最近の報告から**
8. 事故での初期対応は
9. 酸素使用でDCIを予防できるか
10. 総合討論

早急な治療がよいか？

Table 4. Delay from the onset of symptom to hyperbaric treatment and the corresponding success rate of recompression

Delay (h)	Case (n)	Complete Recovery* [n (%)]	Incomplete Recovery [n (%)]	Effectiveness [n (%)]
1–6	2,559 ¹	2,401 (93.8%)	135 (5.3%)	2,536 (99.1%) ³
6–12	1,802 ²	1,579 (87.6%)	216 (12.0%)	1,795 (99.6%) ⁴
12–24	555	473 (85.2%)	80 (14.4%)	553 (99.6%)
24–36	234	189 (80.8%)	43 (18.4%)	232 (99.1%)
>36	119	90 (75.6%)	29 (24.4%)	119 (99.2%)
Total	5,269	4,732 (89.8%)	502 (9.5%)	5,234 (99.3%)

Note: Eight (note 1) and 1 (note 2) cases died before recompression were not included. Twenty-two (note 3) and 2 (note 4) death cases were in these two delay, respectively. Effectiveness is the sum of the rate of complete and incomplete.

*Chi-square test showed that the complete recovery rate decreased significantly with the increase of the delay ($\chi^2 = 114.27$, $P < 0.0001$).

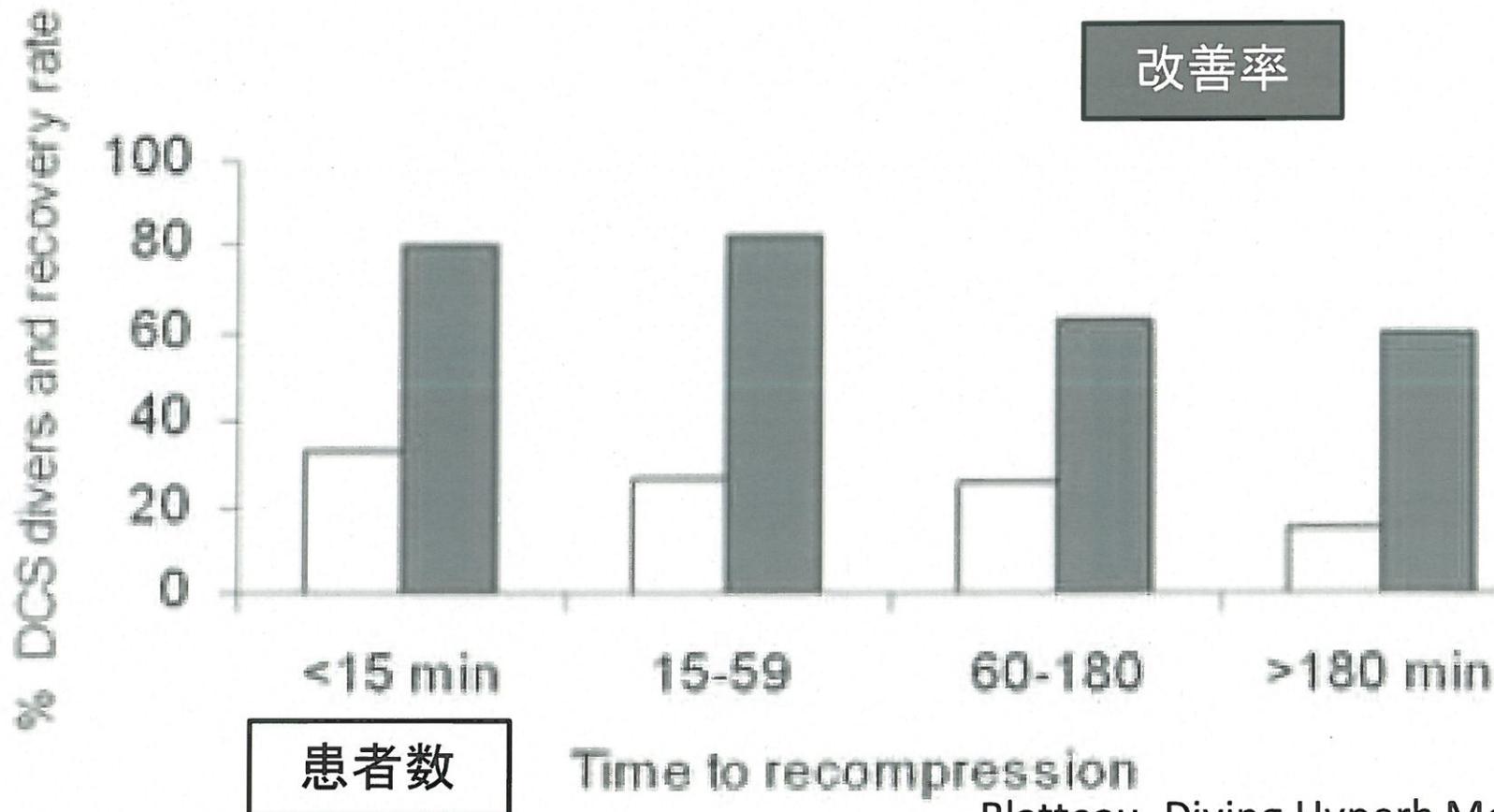
doi:10.1371/journal.pone.0050079.t004

早急な治療がよいか？

Delay (h)	Case (n)	Complete Recovery ^a
1-6	2,559 ¹	2,401 (93.8%)
6-12	1,802 ²	1,579 (87.6%)
12-24	1,100	950 (86.4%)
24-36	234	189 (80.8%)
>36	119	90 (75.6%)
Total	5,269	4,732 (89.8%)

早急な治療がよいか？

Effect of time to recompression on recovery status at one month post-injury in 59 subjects with neurological DCS; open bar = % subjects; solid bar = % full clinical recovery



Analysis of clinical outcome in divers with neurological DCS according to diving data,
clinical characteristics and treatment procedures

Variable	Univariate analysis			Multivariate analysis	
	Full recovery	Sequelae	P	OR (95% CI)	P adj OR (95% CI)
Total (n = 59)	44	15			
Age (yr)			0.26	2.64 (0.7-10.1)	N/A
< 35	37	10			
≥ 35	7	5			
Bottom time (min)			0.94	1.15 (0.35-3.7)	N/A
< 15	25	8			
Initial symptoms			0.017		0.032
Paraesthesia	17	0		N/A	
Sensory deficit	8	4		1	
Motor impairment	19	11		1.16 (0.28-4.76)	
Bladder dysfunction			0.002	14 (2.42-80.93)	0.017
no	42	9			
yes	2	6			
Delay onset of symptoms to recompression (min)			0.15	3 (0.82-10.86)	0.03
≤ 90	36	9			<u>1.01 (1-1.02)</u>
> 90	8	6			
Treatment table regimen (kPa)			0.7	1.32 (0.29-5.92)	N/A
405	37	12			
283	7	3			

Table 2 Analysis of clinical outcome at 1 month in divers with spinal cord DCS according to diving information, clinical characteristics, and treatment procedures

Variables	Full recovery	Sequelae	Univariate analysis		Multivariate analysis	
			P value	OR (95% CI)	P value	Adj OR (95% CI)
Total (n = 279)						
Age (years)						
<42	117	25				
>42	89	48	0.001	2.5 (1.4-4.4)	0.042	1.04 (1-1.07)
Dive time (min)						
<33	102	20				

Recompression delay (h)

<3	54	30			1	
3-6	60	13			0.7 (0.3-1.4)	
>6	52	30	0.024		1.8 (1-3.3)	0.191

Bladder dysfunction

No	159	24				
Yes	17	46	<0.001	22.7 (11.3-41.4)	0.014	3.8 (1.3-11.15)

Evolution before recompression

Symptom disappearance	95	15			1	
Stable	61	29			3 (1.55-6.3)	
Worsening	57	29	<0.001	5 (2.5-10.6)	0.006	3.07 (1.23-3.68)

Initial treatment table

Short tables < 2.8 ATA	118	25			1	
Long tables at 2.8 ATA	25	24			4.53 (2.2-9.2)	
Tables at 4 ATA	43	23			2.52 (1.3-4.9)	
Tables at 6 ATA	20	1	<0.001	0.24 (0.03-1.9)	0.533	

Tables at 6 ATA	20	1	<0.001	0.24 (0.03-1.9)	0.533
Additional HBO					
<5	161	2			
>5	45	71	<0.001	NA	