

안과 분야

Medical Criteria for Evaluation of Degree of Disability Including Industrial Injury - Ophthalmology -

1 657 - 58

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Abstract

Recently, patients who complaining visual disability by an accident is increasing. Visual system consists of the eyes and supporting structures, the neural pathways, and the visual cortex of the brain. And criteriaes form many other institutes have some differences. So there is troublesome problems for clinicians to make a visual disability evaluation and grading. In this chapter, I will introduce criteria for evaluating permanent impairment of visual system as it affects an individual's ability to perform activities of daily living and show some clinical case examples for visual disability rate calculation. To assess the visual disability, clinician should perform many ophthalmologic examinations according to the standardized technique and patient's background should be taken into account together.

Keywords : Visual disability;

Visual disability assessment;

Visual disability rating

: , , ,

가 .
가
,
가 가 , 가
,
가 ,
가 가 가
,
()

Acuity), (Visual Field), (Color Vision),
(Binocular vision) (Stereoaquity),
(Contrast sensitivity) 가 .

가 .

가 .

가 (Recognition Visual Acuity). 가

가

가 0.5

(20/40) 0.25(20/80)

가

가

가

Keltner(1) 1982 Workers Compensation ,

1/3 , 가

(Functional Visual Loss, FVL) 84 59

, 25 . 1983 4

가 35% 가

가

가

가 (=)

(Vision) (Visual

function) (Visual

1.				McBride	
				. 5	
가					
1998					
1998					
1999					
				14	
2000					
() 1999				McBride 가	
() 2003				6	
				McBride 가	
				1963	
				McBride 가	
				1971	
(1). 가 , ,				1995 4 AMA	
				McBride	
, , , ,				가 .	
14				1995 3	
				가 ' (4) 1995 4	
				. 2001 5	
6				Mc-	
				Bride	
				Mc-	
Bride (2) (%)				가 , ,	
. McBride				가 .	
				McBride	
				. 2001 5	
McBride				가 , Snell (Visual Ef-	
1963 6				ficiency) (Func-	
40				tional Vision Score, FVS)	
				(Function al Acuity Score, FAS),	
(American Medical Association, AMA)				(Functional Field Score, FFS)	
가 1971				FVS	
2001 5				FVS(FAS×FFS)/100	
(3).					
1995 4					
1963					

McBride

- 1995 3 가 (kinetic perimetry) Goldman
1. 가
- 3 (Primary factors) , , IV/4e Goldman 2
- 15 . 45
- 1) (Central Vision, CV) 8
- 500 가
- 가 , 가 Tangent 2 mm /1 m 8
- 가 5 가 가 $8 \times 5 \div 5 = 8\%$ 8%
- (0.085 , 5 foot - candles), Goldman 가
- 85 ± 5 candelas/m² ,
- 3 . ,
- 2 boundary meridian 1/2
- 가 , 5% 가
- 50% 가 () 10% 가
- 4 (Functional Visual Loss, FVL)가
- 5 ,
- 25% 가 (
1991. 11 , 가 , ,
-).
- 2) (Visual Field, VF) (spiral), (tubular or tunnel), clover - leaf , (isopters)
- Goldmann III/4e,

FVL

- 70% 25%
78%

3) (Ocular Motility, OM)
가

- 63%

Goldmann

III/4e

- : $0.44 \times 0.68 \times 0.75 = 22\%$

가 Tangent 1 m

78%

가 8

- : $0.54 \times 0.68 = 37\%$

가

63%

가

가

3.

20 가 100%

- 78%, 63% 67%가

가

가 , Hess

$$\frac{3 \times \text{better eye value} + \text{worse eye value}}{4}$$

2.

- : 56%, 32%, 4. ()
46%, 32%
25% 67% 63%

1) 2 (CV & VF)

- (56%) (32%) , ,
(combined). 70%

- (46%) (32%) 5~10%
(combined). 63% , orbit deformity, scarring

2) 1)

10%

1) 가
가 가
foggings
(Visual Evoked Potential VEP/VER)
pattern

가 가
0.1
flash 가가
2) (, ,)

(FVL)

3) 가가

4)

• :

()

5)

가
/ / /

2~3가

6)

7)

1992. 11 가)

$$\begin{aligned} & (\%) = (-) + \\ & \times (-) / 100 \end{aligned}$$

8)

(1)

(2)

가

- : mechanist, glass worker, textile worker, structural worker

가

1) 가 ? 14

, McBride

AMA ?

2) ()

? ,

가 ?

3) / 가,

?

4) 가 ?

?

- : , , (/)
 , 가 . ㉞
 ?

5) 가
(,)

6) 가 . ‘
 ,

가
 .
 7) /
 가, ,

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1995 (A.M.A.'s 3rd ed, 1990, revised)