

두부의 위치와 두진이 지각조절검사에 미치는 영향

이석훈 · 고의경 · 이일우 · 박중환 · 전경명

Effect of Head Orientation and Head Shaking
on Sensory Organization TestSeok-Hun Lee, MD, Eui-Kyung Goh, MD, Il-Woo Lee, MD,
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- ABSTRACT -

Background and Objective : The effects of head position and head shaking on equilibrium have rarely been reported. This study was performed to assess the effects of head position and head shaking on normal healthy young adult using dynamic posturography. **Materials and Methods** : Twenty two healthy male and female volunteers aged 20 -27 years (mean 24.7 years) were assessed by means of dynamic posturography with head centered and then head position changed (head extended and head flexed), and head shaking. SOT (sensory organization test) was tested to determine the effects of head position change and shaking on vestibular function. **Results** : With head centered, we obtained control data in each condition. In condition 5 of SOT, significant lower score was obtained in both sexes when head extended. Under head flexion and headshaking, no significant effect was found. **Conclusion** : Head extension induce the impairment of vestibular input, but with head flexed and after headshaking vestibular function does not significantly affected. (*J Clinical Otolaryngol* 2001;12:47-53)

KEY WORDS : Dynamic posturography · Head extended position · Head flexed position · Head shaking.

서 론

가

(Dynamic posturography)

가

Jackson Epstein¹⁾

(sway) 가

: 2001 5 20

: 2001 6 1

: , 602 - 735

1 - 10

4 5

, Barin²⁾

5, 6

가

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(Fig. 1).³⁾

1 20 3

composite

연구방법

Neurocom® Equitest system computerized dynamic posturography(CDP)

대상 및 방법

연구대상

(head centered)

22

20 27

24.7

12

40

10

50

neck collar

, 40 50

가

neck collar

(head shaking)

지각조절검사 방법

30

90

15

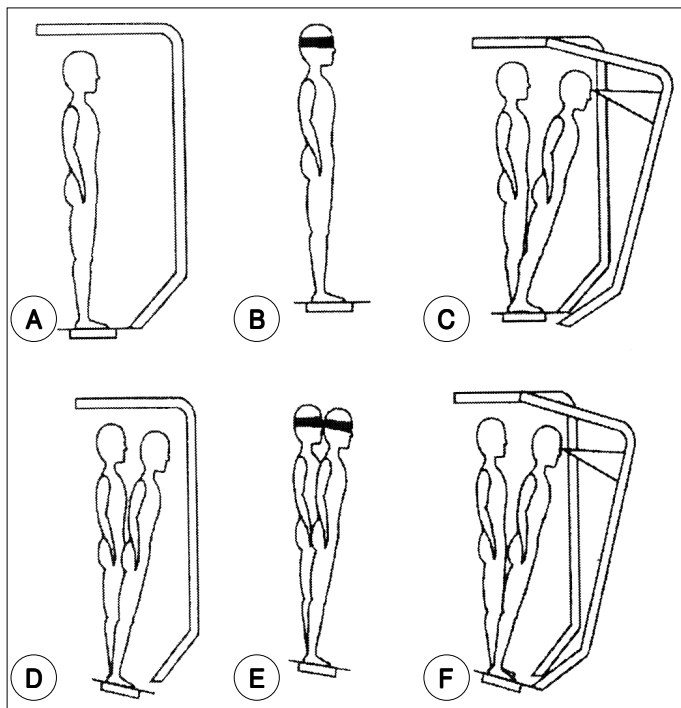


Fig. 1. 6 conditions in sensory organization test in posturography. A : Normal vision, fixed support. B : Absent vision, fixed support. C : Sway-referenced vision, fixed support. D : Normal vision, sway-referenced support. E : Absent vision, sway-referenced support. F : Sway-referenced vision and support.

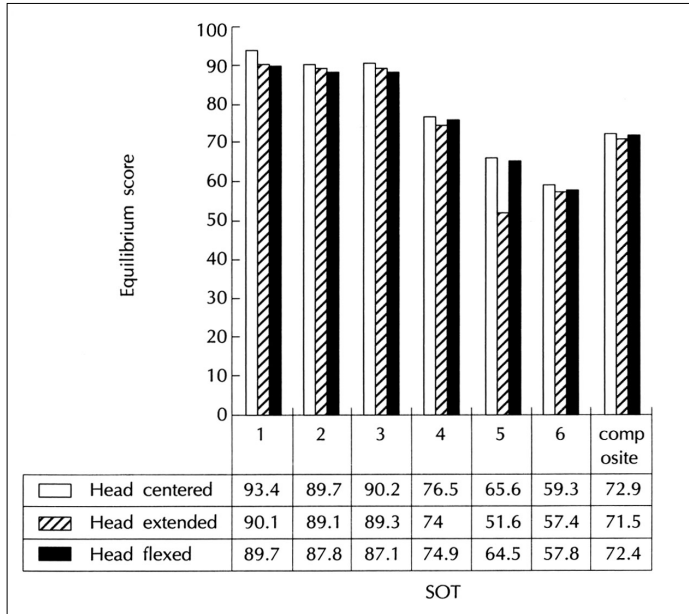


Fig. 2. Score of sensory organization test on several head position (Male). Condition 5 showed significant difference in score between head centered & extended in sensory organization test.

통계처리
 student t -
 test . p 0.05

결과
 두부의 위치에 따른 지각조절검사(Figs. 2 and 3)

Composite 72.9 ± 5.2 , 73.9 ± 5.7

두진후 지각조절검사(Figs. 4 and 5)
 composite 71.6 ± 9.9 , 71.9 ± 10.4 , t - test

통계처리
 student t -
 test . p 0.05

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고찰 (Dynamic posturography) 가 (lat - eral flexion) (unsteadiness) 가 4, 5, 6

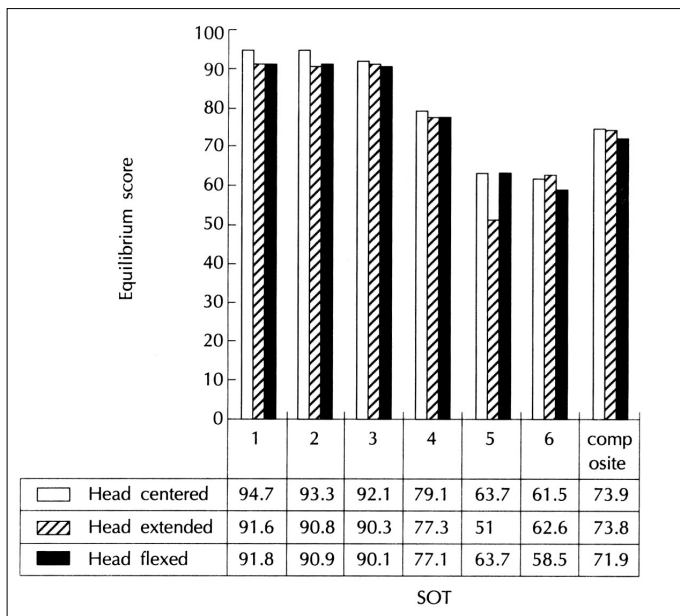


Fig. 3. Score of sensory organization test on several head position (Female). Condition 5 showed significant difference in score between head centered & extended in sensory organization test.

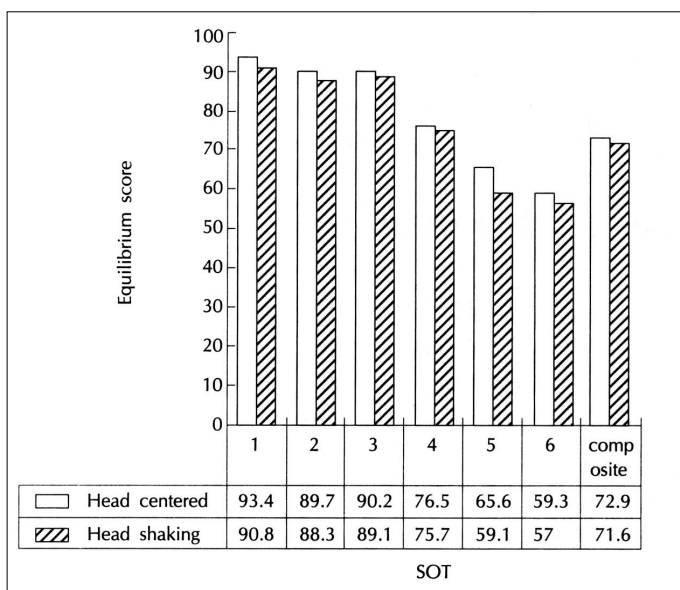


Fig. 4. Score of sensory organization test after head shaking (Male). Each condition showed no difference after head shaking.

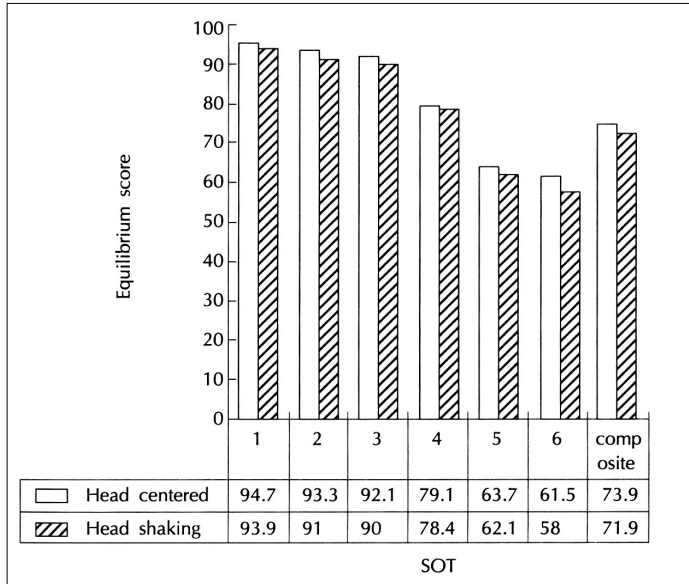


Fig. 5. Score of sensory organization test after head shaking (Female). Each condition showed no difference after head shaking.

가 . 가 가 . Chandra Jackson Epstein¹⁾ 가 3
 Shepard⁵⁾ 가 가 Barin²⁾ 1
 가 가 6
 가 . Brandt⁶⁾
 (sway) 가 ,
 dynamic posturography platform
 Jackson Epstein¹⁾ 3
 1, 2, 3, 4, 6
 가 4 5
 가 , Barin²⁾ 5 t - test
 5, 6 가
 가 1 6
 Jackson Epstein¹⁾ 6
 scatter가 가 Brandt⁶⁾
 가
 sway referenced visual cues
 Barin²⁾
 visual cues
 6 4 가
 2

(head shake nystagmus)
 (electronystagmography, ENG)

Lee Chon

Vogel⁸⁾ Panosian Paige¹⁰⁾

Bu- 가

rgio⁹⁾ 가 15 10 가

가 Lee Chon⁷⁾ 가 가

가

Vogel⁸⁾ Frenzel Baloh¹¹⁾ 75 39 가

Wolfson¹²⁾ 76 34 가

가 Frenzel (aging related disease)

Frenzel 가 20 27

Lee Chon⁷⁾ Frenzel 30 90 , 2 가 , 30

Dickins¹³⁾ 5, 6 , 60 5 가 가

23 25 22 (15 , 7) 3 6 가 가

2 3

가 중심 단어 :

5

14)15)

Ledin <dkvist¹⁶⁾

2 5 2

5 가

5

3)

2, 3, 4, 6 가

5 가

(vestibular dysfunction)

가

가

결 론

20 27

가

5

가

organization test sensory

5

가 가

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