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**Clinical Study on Ginkgo Biloba Injection in Patients with Nervous Deafness of Serum NO Connexin26 Connexin30**

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**Abstract** *Objective* To investigate the Ginkgo biloba injection in patients with nervous deafness of serum NO Connexin26 Connexin30 and clinical effect. *Methods* 92 patients with nervous deafness were selected and divided into control group and experiment group. Control group were treated by conventional treatment of nutritional hyperbaric oxygen and other nutrients. Experiment group were treated on the base on control group with ginkgo biloba injection. The levels of serum Connexin26 Connexin30 and NO before and after the treatment in the two groups before and after treatment were tested and compared. The hearing function of two groups of patients before and after treatment were tested and compared by Pure tone audiometry. *Results* Compared with before treatment the level of NO Connexin26 Connexin30 were higher  $P<0.05$ . Compared with the control group after treatment the level of NO Connexin26 Connexin30 were higher  $P<0.05$ . Compared with the control group after treatment the total clinical efficiency were higher  $P<0.05$ . *Conclusion* Ginkgo biloba injection can improve the sudden sensorineural nerve deafness patients serum NO and Connexin26 Connexin30 restore hearing level in patients with and improve the clinical efficacy has important clinical application value in clinic.

**Key words** ginkgo biloba injection NO Connexin26 Connexin30 nerve deafness clinical effect

Sensorineural hearing loss SNHL

[1] NO 26 Connexin26  
30 Connexin30

[2] 1  
1.1

[3] 2011 11 2014  
92

[4] 5  
46 25 21

41.8± 8.4 <30 dB 6 3  
 30-60 dB 13 60-90 dB 16 3.1  
 >90 dB 11 46 26  
 20 41.3± 7.2 7  
 12 15 12

1.2

25 dB 30 dB  
 15 dB 15-30 dB  
 / × 100% = + +  
 3.2 NO  
 NO  
 P<0.05

1.3

	NO	μ mL
46	39.48±	6.42
46	46.29±	6.64
46	39.98±	6.83
46	68.42±	7.15

1.4

\*P<0.05  
 P<0.05  
 3.3 Connexin26 Connexin30

2

Connexin26  
 Connexin30  
 P<0.05

2.1

Connexin26 Connexin30  
 P<0.05 2  
 Connexin26

A

H37021584 20100930 100 U  
 H31020755 20020913 60 mg 5%  
 250 mL 1 10 d 1  
 5 d 2

	Connexin26	Connexin30
46	0.67± 0.14	0.93± 0.13
46	0.83± 0.124	1.07± 0.14
46	0.68± 0.12	0.94± 0.12
46	1.34± 0.13	1.97± 0.49

2.2

NO Connexin26 Connexin30  
 EDTA- K2 4 mL  
 - 70  
 NO  
 Connexin26 Connexin30 NO  
 Connexin26 Connexin30

\*P<0.05  
 P<0.05  
 3.4  
 91.30%  
 71.74%  
 P<0.05 3  
 n=46

2.3

SPSS 17.0  
 ± s t ±  
 = 0.05 P<0.05

	%	<sup>2</sup>	P
7 11 15 13	71.74		
9 16 17 4	91.30		7.566 0.006

P<0.05

4

[7] . . . . . [13] ET

NO

[8] ATP

[14] Connexin26 Connexin30

[9] Connexin26 Connexin30 [10]

92 NO Connexin26 Connexin30

K Connexin30 Connexin26 K<sup>+</sup> NO Connexin26 Connexin30

Connexin26 Connexin30 K<sup>+</sup>

[11] NO NO NO Ca<sup>2+</sup> Corti [12] NO ET ET

NO Connexin26 Connexin30

NO Connexin26 K<sup>+</sup>

NO Connexin26 Connexin30

NO Connexin26 Connexin30

[1] . . . . . [J]. 2013 35 ( 14) 2136- 2137.

[2] . . . . . [J]. 2011 28( 2) 175- 176

[3] . . . . . [J]. 2012 33 ( 19) 4179- 4181.

[4] . . . . . [J]. 2012 10( 2) 128- 134

[5] . . . . . [J]. 2013 24 ( 13) 1967- 1969

[6] . . . . . [J]. 2013 11 ( 3) 329- 334

[7] Liberman MC Kujawa S G. Hot Topics Hidden hearing loss Permanent cochlear- nerve degeneration after temporary noise- induced threshold shift[ J ].The Journal of the Acoustical Society of America 2014 135 ( 4) 2311- 2311.

[8] Tagge T Barker M Jones A et al. Auditory nerve perinodal dysmyelination in noise- induced hearing loss[ J ].The Journal of Neuroscience 2014 34 ( 7) 2684- 2688

[9] Siddiqi S Siddiqi S Mansoor A et al. Novel mutation in AAA domain of BCS1L causing Bjornstad syndrome[ J ].Journal of human genetics 2013 58 ( 12) 819- 821.

[10] . Connexin43 [J]. 2014 15 ( 1) 43- 48

[11] Pannasch U Freche D Dallé rac G et al. Connexin 30 sets synaptic strength by controlling astroglial synapse invasion[ J ]. Nature neuroscience 2014 17 ( 4) 549- 558

[12] . . . . . [J]. 2012 12 ( 6) 401- 403

[13] . . . . . [J]. 2012 33 ( 6) 429- 431.

[14] . . . . . [J]. 2014 15 ( 2) 204- 206