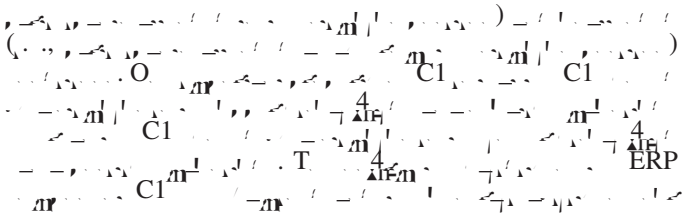
S, C1 /

J C ,[1] ,[1] ,[1] ,[1] F F [1,2,3]

[1] /
[2] /
[3] /

S 15 J 2015; 4 10 N 2015


O
C1
C1
4
C1
4
T
4
ERP
C1

4 <1 ,

2. T

1 4 . T

2 1, 2, 4 O

4 . T 4 (F . 1).

S EEG 64 A /A C

10 20 EEG V

(VEOG) . H EOG (HEOG) . E

5 Ω. EEG 4

500 K, 4 0.05 100 H ,

1,000 H . T

F

O EEG 4

O F B V A

(B P , M , G). T EEG 4

4 30 H 100

300 E

100-

T

±50 μV . T

4 . T ERP

4

.T* (.T*)-276.2( )-276.2 .T* (.T*4)-276.2( )-276.2( ).T

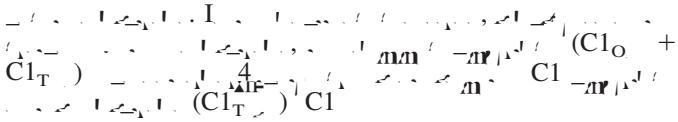
-321.4( )-321.4( )-321.4(T)-321.4

4

.T*-5T* (T*-5T*( )-5T* (. .T*-5T*4)-5T*( )-5T*)-5T*44

.T*-5T*11T*-5T*(*-5T*)-5T* .T*-5T*C1T*-5T* T*-5T*( )-5T* (.T*-5T*( ) TJT* ( ))-12.1( )

.T



−2.91, = 0.008 (23) = −0.58, = 0.56 . A C1 80 - 84 80 T 4 4 20 (. ., 20) 0 < 0.05 (; C 2009) 4 T <0.038 G B (1991). T 4 40 140 ( ). T 40 A C1 V1, BESA 4 C1 T C1 4 4 V1 (T : 16, −88, 7) 94.3% C1 V1 (T : 13, −82, 9) 95.9% C1 . T C1 V1. T F . 2 . T V1 H V1 I V1 A F C1 (K . 2008; M . 1999; R . 2009), F C1 . T C1 4 4 4 4 C1 4 ANOVA, (1,23) = 0.41, = 0.52; (23) < 1.76, > 0.092 . T C1 ANOVA, (1,23) = 3.37, = 0.08; (23) < 1.95, > 0.063 . T (L . 1997; M D 1985). H 4 4 I 4 F P1 C1 (M . 1999), . T 4 P1 P4, P6, P8, PO4, PO8. T P1 106 122 (F . 4). T P1 4 (1,23) = 4.181, = 0.052 , P1 4 (4,92) = 4.051, = 0.005 . B P1 . I 4 P1 (P1 (P1

F P1 I . I P1 P1 P1 P1 . P1 : , (23) = 5.24, < 0.001; , (23) = 3.63, = 0.001 . T P1 I . I (D R . 2003; F . 2010; H . 1994; M . 1998; M . 1999; . 1997), P1 4 (1,23) = 10.25, = 0.004; < 0.02 T , (23) = 1.00, = 0.32 .

2

O C1 4 ( ). T 4 C1 3(6) 3(6) 3(6) 3(6) 3(6) 3(6) C1. T 4 1 4 4 2 4 . S, 4 2, 4 4 ; 4 (F . 1). I 1, 4 4 4

4 ( ). I T 4 4 : O , 80.3 ± 1.71%; T , 83.4 ± 1.29%; T , 82.1 ± 1.64%; T ., 83.5 ± 1.37%; T ., 80.7 ± 1.65%. T (O , T) 4 (T T ; , < 0.04). H ( ) 4

4 4 80
84
D
(1,18) = 0.06, = 0.809
4 (4,72) = 0.805, = 0.526 C1
4
1.
, C1
$C1_O$ + $C1_T$. $C1_T$:
(18) = 1.42, = 0.17; ., (18) = 1.10, = 0.29 .
H , $C1_T$
$C1_O$ + $C1_T$ (18) =
3.63, = 0.002 (18) = 0.24,
= 0.81 . T
(F . 6). T
4
F (F . 6). U
1,
C1 . F 19 ,
(10
, 12 9). R ,
ANOVA
4 (1,18) = 4.57, =
0.046 . A
4
(18) = 2.08, = 0.051
4 (18) =
−0.669,

4

4 O

C1

V1 . M

MRI

(K . 1998). A

(C . 2014) M

(2015)

. F , M .(2015)

. I

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H KA, D , G t JL. P V1 BOLD 23: 233 241, 2004.

H HJ, M G B t , H H, M, M t F, G A, M, J , H H, G M , H W A. C 372: 543 546, 1994.

J DA, A JG. S 4 C 16: 1 21, 1972.

K , D , D LG. M MRI. 282: 108 111, 1998.

K K, J, M A, W BA. C 110: 481 94, 2013.

K W , G M, F JJ. S, C 18: 2629 2636, 2008.

L J. C , MA: M I T , 2005.

L J, C L, H W A, D N V1, V2, V4 77: 24 42, 1997.

M G B MH, G W M, J A . ERP MRI 6: 383 389, 1998.

M t A, A W - t L, MI, F L B t B, D t DJ, EC, H H, H HJ, H W A. I 2: 364 369, 1999.

M W CE, KL, L J. E 105: 229 237, 2015.

M J, D S 229: 782 784, 1985.

L, . O , UK: O U . P , 2006.

A, K C, A, H IJ, L t MJ, J S, 7 105: 1150 229: 39 9 9 R.