The parietal cortex and attentional modulations of activities of the visual cortex

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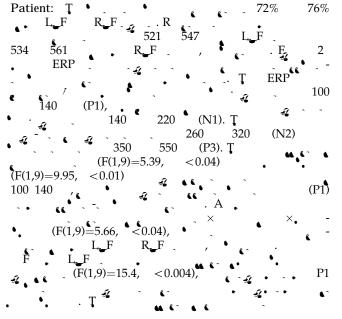
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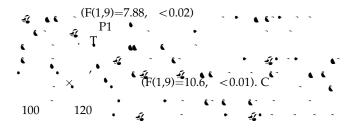
We recorded high density event-related brain potentials (ERPs) from a patient with focal left parietal damage in a covert visual orienting task requiring detection of targets in the attended or unattended hemifield. A positivity peaking at 120 ms (PI) to the left visual field stimuli was enlarged when attended than unattended and was localized to the right extrastirate cortex. However, spatial attention did not influence the ERPs to the right visual field stimuli. The leftward cue elicited an enlarged PI relative to the rightward cue. The results suggest that human parietal cortex is critical for the attentional modulation of the neural activities in the extrastriate cortex associated with stimuli in the contralateral hemifield. *NeuroReport* 15:2275–2280 © 2004 Lippincott Williams & Wilkins.

Key words

$$\begin{array}{c} & & MR \\ & & T \\ & & & T \\ & & & & \\ & & & & \\ & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & &$$

RESULTS



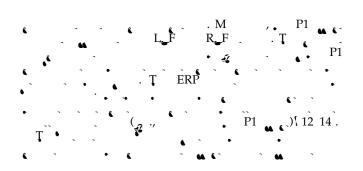


463 , R_F: 448) , R_F: 475 ; F(1,5)=16.3, (L**_**F: 496 <0.01). Ę 4 . ERP ٠ . ANO. A ٤. ٩ £ ... (F(1,5)=14.2, <0.02), 100 140 6.1 £ P1 ÷ . Н 6 6 (F < 1), \times £1£1 . . P1 I R F 6 44 Ţ N1 140 160 (F(1,5)=9.10, • <0.03). C 6 Р1 ٠ . 6. (F Т F 4 Ţ 1 -27.2, -70.7, -1.2 (R, F,); -26.9, -29.7, -9.9 (R, F, -72.0, -2.3 (L, F,); 15.4, -72.2, -0.3 (L, F,); 23.0,).

F 5 80 130 (P1) (N1). ANO, A ERP 80 200 (F < 1).

DISCUSSION

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	ERP	6	•••
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N1 . S P1 £ £. £ £ N1 ۲<u>25</u>, ÷ 1 £ Û ٤ -

CONCLUSION

ERP Ţ . 6.

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