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## Eye movements and verbal reports in neglect patients during a letter reading task.

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OBJECTIVES: To study different typolologies from visuo-verbal behavior concerning the arrest and the treatment of visual information in patients with spatial hemineglect.

METHODS: Ocular movements were monitored by photo-oculography in thirty controls and twenty-three patients with neglect. During a letter reading task, the movements, number of entries into predetermined zones of the visual field, time spent in each zone, and the verbal responses were recorded. Four profiles may be anticipated for such trials: normal scanning and reading (S+R+), normal scanning without reading (S+R-), absence of both scanning and reading (S-R-), abnormal scanning with reading (S-R+).

RESULTS: The letter projected in each of the 4 quadrants was scanned and correctly identified by all of the controls with no differences in scanning times. Among patients, the 4 possible behavior patterns were found along with differences in exploration duration per zone (p < 0.05) and number of times specific zones were attained (p < 0.05).

CONCLUSIONS: Our results confirmed the heterogeneity of the mechanisms of neglect and suggest that rehabilitation procedures adapted to each profile might be useful.