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Allokinesia

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Definition

This phenomenon refers to a motor response in the wrong limb, contralateral to the requested side, sometimes opposite to the direction requested. It can include nonvoluntary, mirror movements.

Current Knowledge

Allokinesia is often associated with neglect syndromes, usually involving damage to the right hemisphere. It is the motor counterpart of allesthesia. Typically, a patient moves the right limb in response to a request to move the left limb or moves toward the right, away from the

neglected side, when asked to move toward the neglected side. In animal models, the phenomena has been associated with frontal, arcuate gyrus lesions (Heilman et al. 1995) and disconnections of frontal and posterior parietal cortices (Burcham et al. 1997).

Cross-References

- [Allesthesia](#)
- [Neglect Syndrome](#)

References and Readings

- Burcham, K. J., Corwin, J. V., Stoll, M. L., & Reep, R. L. (1997). Disconnection of medial agranular and posterior parietal cortex produces multimodal neglect in rats. *Behavioural Brain Research*, 86(1), 41–47.
- Heilman, K. M., Valenstein, E., Day, A., & Watson, R. (1995). Frontal lobe neglect in monkeys. *Neurology*, 45(6), 1205–1210.