

RECOVERY TIME FOR PLACING FOLLOWING UNILATERAL ABLATIONS IN CATS

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Placing refers to certain movement sequences of an animal in which a paw is lifted up, moved forward and set down on a surface. In the cat, placing of a forelimb in response to chin contact on the edge of a table is the most easily elicited. Contact of the dorsum of the forepaw with the table edge is less regularly elicited in the normal cat and less apt to recover following brain lesions. Loss of chin contact placing was reported to follow hemidecortication (Rademaker) or sensori-motor cortex ablation (Bard). We have found that the complete loss which follows a frontal lobe removal is succeeded by gradual reacquisition of chin contact placing so that in 8 - 12 weeks the majority showed responses hardly distinguishable from that of the unaffected limb. Following hemispherectomy on one side, the placing reaction recovers in fewer animals and, for full recovery, requires a longer period than with the more restricted cortical lesion. We have previously noted that contralateral removals may accelerate recovery from hemispherectomy. (Science, 135, 309, 1962). Supported by grants from the John A. Hartford Foundation and the Office of Naval Research.

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