LANGUAGE IN HUMAN PATIENTS AFTER BRAIN BISECTION. M. S.

Testing of 2 patients with section of callosum, anterior
and hippocampal commissures, and massa intermedia showed that
right and left hemispheres work separately in perceptual,
cognitive, learning and mnemonic activities. Verbal descrip-
tion of test material was possible for left hemisphere only;
oral or written responses to stimuli in left hand or left
half visual field suggested complete agnosia. However, good
comprehension by the right hemisphere of similar test material
was clearly evident when tests were designed that did not re-
quire direct verbal expression. For example, when words were
shown in left visual field that were unreportable by speech,
the corresponding object or picture could be selected from
among a series. Likewise word cards were correctly retrieved
for pictures of objects or scenes flashed to the left visual
field or for objects held out of sight in the left hand.
Correct numeral symbols were also retrieved after random pre-
sentation of 1 to 4 dots to left field where they were not
reportable by speech. Further, with eyes blindfolded, spoken
instructions could be followed for retrieving correct objects
by palpation with left hand. The total evidence favors the
view that even where speech and writing are strictly lateral-
ized the engrams for language comprehension may be bilateral.
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