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Enkephalin But Not Morphine Modulates The Motor Activity in the Frog Spinal Cord *In Vitro*

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1. In the isolated frog spinal cord, methionine-enkephalin (ME, up to 3×10^{-5}M) hyperpolarized the resting ventral and dorsal root potentials.

2. These hyperpolarizations remained even under Ca^{2+}-free conditions.

3. ME depressed the fast component of the electrically stimulated spinal reflex and enlarged the following depolarizing component.

4. Morphine (10^{-4}M) had no apparent ME-like effects.

5. ME may directly and indirectly affect the motoneuron and modulate the spinal motor activity in the frog spinal cord.

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