Pitrazepin: Interactions with Transmitter Receptors of the Central and Peripheral Nervous Systems

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ABSTRACT

Pitrazepin [3-(piperazinyl-1)-9H-dibenz(c,f)triazolo(4,5-a)azepin], is an N-aryl-piperazine derivative, whose heterocyclic structure is similar to that of atypical antipsychotics like clozapine. This paper is an overview of the pharmacological actions of pitrazepin, with an emphasis on its actions on GABA_A and glycine neurotransmitter receptors. Recent results on the antagonist actions of pitrazepin on acetylcholine (ACh) currents in oocytes expressing either rat neuronal or mouse muscle nicotinic acetylcholine receptors are presented. Many of the pharmacological features of the new-generation antipsychotics have been derived from studies of structurally treated drugs. A detailed understanding of the interactions of these drugs with neurotransmitter receptor is necessary to develop more effective antipsychotics.