

제 목	Isoquinolines: Are they possible candidate for Ca <sup>2+</sup> blockers?
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내 용	<p>Calcium entry blockers, capable of inhibiting transmembrane influx of extracellular calcium through specific calcium channels, are useful drugs in the treatment of angina pectoris, hypertension, cardiac arrhythmia, and various cardiovascular disorders. Compounds having isoquinoline structures have recently been reported to possess calcium antagonistic action. Therefore, in the present study, we have attempted to synthesize some isoquinoline and related compounds in order to search for potentially effective chemicals acting on cardiovascular system, and evaluated their pharmacological properties focusing on calcium antagonistic actions. Almost all of the compounds so far synthesized, had inhibitory action against phenylephrine or high potassium-induced contraction in vascular smooth muscle with different degrees of potencies depending on their structures. However, some of tetrahydroisoquinoline analogs showed directly inhibit calcium current in isolated rabbit cardiac myocytes examined by patch clamp techniques. The pharmacological properties of these compounds need more intensive investigation as to whether these chemicals may have developed as a new cardiovascular active drugs. Therefore, we are now under investigation of the mechanism of action of these compounds.</p>