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Spasmolytic Effects of Salvia triloba Leaf Extract on Smooth Muscles of the Duodenum in Rats

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ABSTRACT Salvia triloba is considered one of the medicinal plant that is frequently used in Jordan and the Middle East in alternative medicine against a number of diseases, including gastrointestinal disorders. The effects of Salvia triloba leaf aqueous extracton the isolated smooth muscles of the rat duodenum were investigated. Isolated organ bath was adopted. The specimens were pre-contracted with reagents such as acetylcholine, potassium chloride (KCl), and barium chloride (BaCl₂). Then Salvia triloba extract was added in concentrations of 0.1–3mg/ml. The contraction-inhibition signals were collected and the effect was traced and analyzed. The aqueous Salvia triloba leaf extract inhibited the spontaneous contraction of rat duodenum in a dose-dependent manner, especially in the inhibition of acetylcholine. No significant inhibition was noticed with either KCl or BaCl₂. The aqueous Salvia triloba leaf extract showed antispasmodic action which took its effect through the inhibition of acetylcholine that explained its use traditionally in alleviating gastrointestinal disorders.