Anisodamine is a tropane alkaloid originally found in plants in the Solanaceae family; it exhibits anti-inflammatory activity and is clinically used to induce atropinization in organophosphate poisoning subjects and to improve acute lung injury pathology and respiratory parameters. Anisodamine inhibits α1-adrenergic receptors and muscarinic acetylcholine receptors (mAChRs). Anisodamine is also clinically used to treat acute glomerulonephritis and diabetic nephropathy, and also to improve renal microcirculation. Additionally, anisodamine decreases expression of VEGF and ICAM-1 and suppresses inflammatory cell infiltration and proliferation, decreasing perivascular hemorrhage in animal models of phlebitis.

References


