Lignocaine with adrenaline: is it as effective as cocaine in rhinological practice?


This double-blind study compares the effectiveness of two local anaesthetics with vasoconstrictive activity (10% cocaine and 4% lignocaine with adrenaline 1:1000) used in the nose. Anterior rhinomanometry was used to assess changes in nasal mucosal blood volume from a reduction in congestion of the nasal mucosa with a resulting reduction in nasal resistance. Nasendoscopy was then performed and the degree of subjective discomfort evaluated. Twenty patients presenting with nasal obstruction but without evidence of structural disease and nine healthy volunteers were entered into the study. Each received 10% cocaine in one nostril, and 4% lignocaine with adrenaline (1:1000) in the other in a double-blind study. In all subjects, there was a significant reduction of nasal resistance after the administration of both drugs (P < 0.005). The anaesthetic effects of both agents were comparable with subjects reporting only a mild discomfort during nasendoscopy. We conclude from this study that 4% lignocaine with adrenaline (1:1000) solution is as effective as 10% cocaine.