Transient loss of power of accommodation in 1 eye following inferior alveolar nerve block: Report of 2 cases

W.C. Ngeow
C. K. Shim
W. L. Chai
Transient loss of power of accommodation in 1 eye following inferior alveolar nerve block: Report of 2 cases

Abstract

Unintended intravascular injection from inferior alveolar nerve blocks can result in frustrating distant complications affecting such structures as the middle ear and eyes. Possible complications affecting the eyes include blurring of vision, diplopia, mydriasis, palpebral ptosis and amaurosis (temporary or permanent). In this article, we present a complication that has been reported only rarely. Two patients developed transient loss of power of accommodation of the eye resulting in blurred vision after routine inferior alveolar nerve blocks on the ipsilateral side. Clear vision returned within 10 - 15 minutes after completion of the blocks. The possible explanation for this phenomenon is accidental injection into the neurovascular bundle of local anesthetic agents, which were carried via the blood to the orbital region. This resulted in paralysis of a branch of cranial nerve III, the short ciliary nerves that innervate the ciliary muscle, which controls accommodation.

Authors: Ngeow, W. C.; Shim, C. K.; Chai, W. L.

Journal: Journal of the Canadian Dental Association

Year: 2006

Pages: 927-931

Keywords:

anesthesia, dental/adverse effects; diplopia/chemically induced; eye/drug effects; LOCAL-ANESTHESIA; DENTAL-ANESTHESIA; COMPLICATIONS; INJECTION; DIPLOPIA; PALSY