

Cyclopentolate/oxybuprocaine

Systemic anticholinergic effects following ophthalmic administration: case report

A 34-year-old woman experienced systemic anticholinergic adverse effects after she received 2–3 drops of cyclopentolate 1% ['Cyclogyl'] in each eye, in addition to oxybuprocaine 0.4% ['Novesin'], for a routine eye examination.

Soon after the eyedrops were administered, the woman developed dizziness, nausea, weakness, tachycardia, agitation, ataxia, asthenia and loss of hearing. Her symptoms improved over the next 4 hours. She was admitted to an emergency department overnight. Three days later, however, she presented with 'flashbacks' of diffuse dizziness, apprehension, heaviness in the legs, marked memory deficits and difficulties in concentrating. Careful evaluation revealed only marked apprehension.

An anaphylactic reaction to either cyclopentolate or oxybuprocaine was suspected and the patient was referred for investigation into a possible allergic reaction. There was, however, no conjunctivitis, pruritus, erythema, bronchospasm or urticaria, so an immune-mediated anaphylactic reaction was excluded.

Author comment: *'Our patient appears to have experienced systemic pharmacologic effects after instillation of 1% cyclopentolate . . . She also received oxybuprocaine, an ester local anesthetic, which may have contributed to her reaction.'*