

**Session: Neurooftalmologija in mrežnične distrofije / Neuro-ophthalmology and retinal dystrophies**

**Chairs: Marko Hawlina and Martina Jarc Vidmar**

OR-009

**From itch to glitch: Ischemic events during omalizumab treatment**

Ana Cvetko, Nenad Kljaić, Katja Karničnik

Univerzitetni klinični center (UKC) Maribor, Slovenia

Case report of a 70-Year-Old patient with spontaneous chronic urticaria who developed ischemic cerebrovascular events during omalizumab therapy.

A retrospective analysis of a patient who, three weeks after receiving the first dose of omalizumab, visited the emergency neurology clinic due to dizziness, gait instability, and headache. A CT scan of the head revealed a lacunar ischemic cerebrovascular event (ICV) and a known condition after the embolization of an aneurysm of the anterior communicating artery. Clinically, there was left-sided hemiparesis and right-sided central facial nerve palsy.

One week after receiving the second dose of omalizumab, the patient reported an upper visual field loss in the right eye. Clinically, ischemic edema was observed in the area of the right inferior temporal artery, suggesting an embolic occlusion of the branch of the central retinal artery. A CTA of the brain and cervical vasculature showed hemodynamically significant stenosis of the right internal carotid artery (ICA). The patient was presented at a neuroradiological consult, where a revascularization procedure (TEA) was recommended. Static perimetry showed an upper altitudinal visual field loss in the right eye. The patient was started on dual antiplatelet therapy with the addition of a statin.

Two weeks after receiving the second dose of omalizumab, the patient again visited the emergency neurology clinic due to dysphasia and right-sided hemiparesis. CT perfusion imaging showed a penumbra in the posterior portion of the left middle cerebral artery (MCA) territory, and thrombolysis was indicated, after which there was clinical improvement in the patient's condition.

Omalizumab is a biologic medication used to treat severe asthma, nasal polyps, and chronic urticaria. Despite its proven effectiveness in managing these conditions, rare reports have linked it to adverse effects, such as ischemic cerebrovascular and cardiovascular events. In this case, the therapy with omalizumab was discontinued, following appropriate management of cardiovascular risk factors.

**Od alergij do embolij: Ishemični dogodki ob zdravljenju z omalizumabom**

Ana Cvetko, Nenad Kljaić, Katja Karničnik

Univerzitetni klinični center (UKC) Maribor, Slovenia

Prikaz primera 70-letnega bolnika s spontano kronično urtikarijo, ki je ob terapiji z imunomodulatornim zdravilom omalizumab razvil ishemične cerebrovaskularne dogodke.

Retrospektivna analiza bolnika, ki je tri tedne po prejetju prve aplikacije omalizumaba obiskal urgentno nevrolško ambulantno zaradi vrtoglavice, nestabilnosti pri hoji in glavobola. Na CT glave je bil prikazan lakunarni ishemični cerebrovaskularni dogodek (ICV) ter že znano stanje po embolizaciji anevrizme sprednje komunikantne arterije. Klinično so bile prisotne levostranska hemipareza in desnostranska centralna pareza obraznega živca.

Teden dni po prejetju druge aplikacije omalizumaba je bolnik poročal o izpadu zgornje polovice vidnega polja desnega očesa. Klinično je bil viden ishemičen edem v predelu spodnje temporalne arterije desno, kar je kazalo na embolično okluzijo veje centralne retinalne arterije. CTA možganskega in vratnega ožilja je prikazal hemodinamsko pomembno zožitev desne ACI. Bolnik je bil predstavljen na nevroradiološkem konziliju, kjer so svetovali revaskularizacijski poseg (TEA). Statična perimetrija je pokazala zgornji altitudinalni izpad desno. Bolniku je bila uvedena dvotirna antiagregacijska terapija z dodatkom statina.

Dva tedna po prejetju druge aplikacije omalizumaba je bolnik ponovno obiskal urgentno nevrolško ambulantno zaradi disfazije in desnostranske hemipareze. CT perfuzija je prikazala penumbro v posteriorni polovici področja leve ACM, indicirana je bila tromboliza, po kateri je prišlo do izboljšanja kliničnega stanja.

Omalizumab je biološko zdravilo, ki se uporablja za zdravljenje hude astme, nosnih polipov in kronične urtikarije. Kljub dokazani učinkovitosti pri obvladovanju teh bolezni pa v redkih primerih poročajo tudi o neželenih učinkih, kot so ishemični cerebrovaskularni in kardiovaskularni dogodki. V tem primeru je bila terapija z omalizumabom, ob ustrezni obravnavi dejavnikov tveganja za kardiovaskularne dogodke, ukinjena.

