Toxic anterior segment syndrome (TASS): a potentially-dreaded complication of phaco-emulsification.

Session Details

Session Title: Cataract surgery complications / management
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Abstract Details:

Purpose:
To describe a case of worsening of vision following phaco-emulsification attributed to toxic anterior segment syndrome (TASS) attributed to metallic particles emerging from the irrigation port.

Setting:
University Malaya Medical Centre, Kuala Lumpur, Malaysia.

Methods:
A 67 year old woman underwent left phaco-emulsification and intra-ocular lens implant. The surgery had reached the stage of irrigation-aspiration of viscoelastic. At that point, the surgeon noted multiple black and refractile particles in the anterior chamber which had emerged from the irrigation-aspiration cannula. Attempt was made to further aspirate the particles. On the next post-operative day, the left eye was found to have vision of CF. There was generalized corneal oedema and some white particulate matter were seen on the corneal wound. The pupil was dilated. Intra-ocular pressure was normal. Fibrin was seen in the anterior chamber.

Results:
An emergency AC washout, vitreous tap was performed and intra-vitreal antibiotics given. Vitreous and aqueous cultures were negative. After treatment with intensive topical corticosteroids and antibiotics the inflammation subsided but the cornea remained decompensated and the pupil was dilated. Glaucoma developed and is controlled with topical beta-blocker. Corneal transplant is planned later but prognosis for vision may be guarded in view of glaucoma, age of patient and possibility of cystoid macular oedema.

Conclusions:
TASS is a recognized complication of phaco-emulsification. Many possible causes are postulated. This is the first case in which particulate matter was observed. The irrigation fluids, phaco-aspiration port and tubings are possible source for these foreign matter. Financial disclosure: The authors have no financial disclosure to make.