Multiple drugs

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Gastrointestinal upset following drug intolerance and lack of efficacy: case report

A 31-year-old man exhibited lack of efficacy during treatment with povidone iodine, voriconazole, ofloxacin, polyhexamethylene biguanide, miltefosine, chlorhexidine, paracetamol, neomycin/bacitracin/polymyxin-B, propamidine, unspecified narcotics and neomycin/polymixin-B/dexamethasone for recalcitrant Acanthamoeba Keratitis. Additionally, he developed gastrointestinal upset following voriconazole and miltefosine intolerance [*not all dosages and routes stated; duration of treatment to reaction onset and outcome for ADR not stated*].

The man, who had been diagnosed with keratoconus, at 17 years of age, presented with complaints of right eye pain and redness, at 31 years of age. At 24 years, he underwent deep anterior lamellar keratoplasty and after 1 year photorefractive keratectomy (PRK). In his right eye, he had apical corneal scarring and had worn scleral contact lenses for the past 3 years. Four months prior to the current presentation, he was diagnosed with an infectious corneal ulcer in the right eye. Subsequently, he started receiving valacyclovir and ganciclovir in the right eye. Later, he was followed for 3 months and was switched to famciclovir and loteprednol etabonate [loteprednol] with a stable clinical course. After 3 months of treatment, he presented with right eye pain and redness, on examination his uncorrected distance visual acuity (UDVA) was 20/400 pinhole 20/70 with an oval ring of subepithelial granular opacities and overlying epithelial elevation was noted. Subsequently, corneal epithelial debridement with instillation of 5% povidone iodine drops every 2 minutes for a total of 10 minutes was performed and later, he was treated with ofloxacin drops 0.3% every hour and neomycin/bacitracin/polymyxin-B ointment 3.5 mg/10,000 units four times a day. Thereafter, Acanthamoeba cultures were observed positive. Subsequently, he started receiving chlorhexidine 0.02% every hour, topical voriconazole 1% every hour, ofloxacin 0.3% every 2 hours and neomycin/bacitracin/polymyxin-B ointment 3.5 mg/10,000 units at bedtime. After 5 days, polyhexamethylene biguanide every hour was initiated. During this time, he had UDVA 20/400 pinhole 20/125 in the right eye with a slit lamp exam of the right eye showing 2–3+ punctate epithelial erosions and central subepithelial haze. Thereafter, he was returned home and later, due to COVID-19 he lost to follow up for 2 months. He had been instructed to follow-up with a local ophthalmologist and as per records, he developed perineuritis following self-discontinuing voriconazole. His treatment was initiated with neomycin/polymixin-B/dexamethasone 3.5 mg/10,000/0.1% units ophthalmic ointment and continued on polyhexamethylene biguanide 0.04%, propamidine [Brolene] 0.1% and oral voriconazole 400 mg/day with concern for medication non-adherence. He also experienced severe eye pain which was not improved with topical lubrication or oral paracetamol [acetaminophen]; hence, unspecified narcotics was prescribed for his eye pain. After 2 months, he returned to the clinic and was observed with hand motion visual acuity in the right eye and his slit lamp examination of the right cornea revealed disciform endotheliitis, keratic precipitates and perineuritis. His treatment with topical voriconazole 1%, polyhexamethylene biguanide 0.04%, chlorhexidine 0.02% was continued and remaining therapies were discontinued. Two intrastromal injections of voriconazole 50 µg/0.1mL were administered one week apart, but he refused additional intrastromal injections due to eye pain. He developed consolidating ring infiltrate and subsequently, started receiving oral miltefosine 50mg three times a day. However, he reported difficulty tolerating oral voriconazole and miltefosine because of gastrointestinal upset. In view of his worsening clinical status despite different therapies (lack of efficacy) and intolerance to medications, a photoactivated chromophore for infectious keratitis corneal collagen cross-linking (PACK-CXL) was performed. Thereafter, he continued with chlorhexidine and PACK-CXL. His pain was completely resolved 4 weeks after PACK-CXL and the infiltrate decreased in both size and density over the next ten weeks. At the last follow-up 3 months after PACK-CXL, he continued to be pain-free and his vision was count fingers at 2 feet, with central corneal scarring and neovascularization without signs of active infection.

Watson SH, et al. Treatment of recalcitrant Acanthamoeba Keratitis with Photoactivated Chromophore for Infectious Keratitis Corneal Collagen Cross-Linking (PACK-CXL). American Journal of Ophthalmology Case Reports 25: Mar 2022. Available from: URL: http://doi.org/10.1016/j.ajoc.2022.101330 803646444