

Supplementary file 1. Currently available evidence for Herpes Simplex Virus and Varicella-Zoster Virus anterior uveitis management - Studies graded by Level of Evidence

STUDY	Year	Study design	Level of evidence	Number of patients	Type of AU	Control group (yes/no)	Treatment	Treatment outcome	Treatment outcome definition	Conclusions
A controlled trial of oral acyclovir for iridocyclitis caused by herpes simplex virus. The Herpetic Eye Disease Study Group. <i>Arch Ophthalmol.</i> 1996;114(9):1065-1072.	1996	Multicenter controlled clinical trial	3	50	HSV iridocyclitis	yes	10-week course of either <b>oral acyclovir</b> 400mg 5 times daily (22 pt), or oral placebo (28 pt), in conjunction with regimens of <b>topical trifluridine and topical corticosteroid</b>	<b>Failure</b> in 11 (50%) of the 22 patients in the acyclovir-treated group and in 19 (68%) of the 28 patients in the placebo group (treatment effect seemed slightly greater when only pt with persistence or worsening of ocular HSV disease were considered as treatment failure). 6-month visit was completed by all 18 patients (9 in each group) who did not experience treatment failures and were not lost to follow-up by 16 weeks. <b>Recurrence</b> of ocular HSV disease occurred in 3 of the 9 patients in the acyclovir-treated group and 2 of the 9 in the placebo group	Treatment failure was defined as a persistence or worsening of ocular inflammation, withdrawal of medication because of toxicity, or a request by the patient to withdraw from the trial for any reason	Results suggest a benefit of oral acyclovir in the treatment of HSV iridocyclitis in patients receiving topical corticosteroids and trifluridine prophylaxis
A controlled trial of oral acyclovir for the prevention of stromal keratitis or iritis in patients with herpes simplex virus epithelial keratitis. The Epithelial Keratitis Trial. The Herpetic Eye Disease Study Group [published correction appears in <i>Arch Ophthalmol</i> 1997 Sep;115(9):1196]. <i>Arch Ophthalmol.</i> 1997;115(6):703-712.	1997	Randomized, double-masked, placebo-controlled clinical trial	2	287	HSV epithelial keratitis	yes	Patients with HSV epithelial keratitis of 1-week or less duration were treated with <b>topical trifluridine</b> and were randomly assigned to receive a 3-week course of <b>oral acyclovir</b> , 400 mg 5 times a day (hereafter referred to as the acyclovir group), or placebo (hereafter referred to as the placebo group). 153 assigned to the acyclovir group and 134 to the placebo group.	Stromal keratitis or iritis developed in 17 (11%) of the 153 patients in the acyclovir group and in 14 (10%) of the 134 patients in the placebo group. Compared with the placebo group, the adjusted rate ratio for the development of stromal keratitis or iritis in the acyclovir group was 1.16 (95% confidence interval, 0.56-2.43). The development of stromal keratitis or iritis was more frequent in patients with a history of HSV stromal keratitis or iritis than in those without such a history (23% vs 9%; P=.01).	Development of HSV stromal keratitis or iritis was assessed during 12 months of follow-up.	For patients with HSV epithelial keratitis treated with topical trifluridine, no apparent benefit of a 3-week course of oral acyclovir in preventing HSV stromal keratitis or iritis was seen during the subsequent year. The 1-year rate of development of stromal keratitis or iritis was lower than previously reported in the literature, except in patients with a history of HSV stromal keratitis or iritis.

<p>Acyclovir for the prevention of recurrent herpes simplex virus eye disease. Herpetic Eye Disease Study Group. <i>N Engl J Med.</i> 1998;339(5):300-306.</p>	<p>1998</p>	<p>Randomized, double-masked, placebo-controlled clinical trial</p>	<p>2</p>	<p>703</p>	<p>Ocular HSV disease</p>	<p>yes</p>	<p>400 mg of <b>acyclovir</b> or placebo orally twice daily for 12 months</p>	<p>The cumulative probability of a recurrence of any type of ocular HSV disease during the 12-month treatment period was 19 percent in the acyclovir group and 32 percent in the placebo group (P&lt;0.001). There was no rebound in the rate of HSV disease in the six months after treatment with acyclovir was stopped.</p>	<p>Recurrences were classified as infections of the ocular surface (blepharitis, conjunctivitis, or epithelial keratitis), stromal keratitis (corneal stromal inflammatory infiltrate or corneal edema associated with endothelial inflammatory precipitates), or iritis.</p>	<p>Long-term treatment with acyclovir helps prevent recurrences of ocular HSV disease and orofacial HSV infections in patients with a history of ocular HSV disease.</p>
<p>Miserocchi E, Modorati G, Galli L, Rama P. Efficacy of valacyclovir vs acyclovir for the prevention of recurrent herpes simplex virus eye disease: a pilot study. <i>Am J Ophthalmol.</i> 2007;144(4):547-551.</p>	<p>2007</p>	<p>Prospective, randomized, clinical trial pilot study.</p>	<p>2</p>	<p>52</p>	<p>Recurrent ocular HSV disease</p>	<p>no</p>	<p>Twenty-six patients were randomized to the <b>valacyclovir</b> group (one 500 mg tablet daily), and 26 patients were randomized to the <b>acyclovir</b> group (one 400 mg tablet twice daily).</p>	<p>Recurrence of any type of ocular HSV disease during the 12-month treatment period was 23.1% in the valacyclovir group, compared with 23.1% in the acyclovir group. No difference between the two groups was observed regarding the nature, frequency, or severity of adverse events.</p>	<p>Recurrence rate of ocular HSV disease during 12 months of treatment</p>	<p>One-year suppression therapy with oral valacyclovir (500 mg tablet daily) was shown to be as effective and as well tolerated as acyclovir (400 mg tablet twice daily) in reducing the rate of recurrent ocular HSV disease.</p>

Miserocchi E, Waheed NK, Dios E, et al. Visual outcome in herpes simplex virus and varicella zoster virus uveitis: a clinical evaluation and comparison. <i>Ophthalmology</i> . 2002;109(8):1532-1537.	2002	Retrospective comparative study	4	64	40 with HSV uveitis and 24 patients with VZV uveitis	no	Most patients were treated with <b>systemic acyclovir</b> (87% of HSV and 79% of VZV patients) and <b>topical steroids</b> (95% of HSV and 87% of VZV patients)	The percentage of eyes that were legally blind at end of follow-up was comparable (HSV, 20%; VZV, 21%). The visual outcome was similar in the studied populations.	Clinical presentation of the disease, ocular complications, visual acuity, surgical and medical treatments needed	Treatment modalities selected were generally similar in the two groups, although periocular and systemic steroids were required more frequently in HSV patients (60% versus 25%; P 0.01).
Miserocchi E, Fogliato G, Bianchi I, Bandello F, Modorati G. Clinical features of ocular herpetic infection in an Italian referral center. <i>Cornea</i> . 2014;33(6):565-570.	2014	Retrospective study	4	241	189 (78.4%) patients had HSV, 45 (18.7%) had VZV, and 7 (2.9%) had CMV infection. In the HSV and VZV groups anterior uveitis 33.3% and 28.9%, respectively.	no	<b>Oral acyclovir or valacyclovir</b> was given in the acute stages of uveitis, and daily doses were maintained <b>prophylactically</b> to prevent recurrences in most instances. <b>Antiviral prophylaxis</b> consisted of the use of acyclovir (400 mg twice daily) or valacyclovir (500 mg everyday) for at least 1 year.	Overall recurrence of eye disease was diagnosed in 148 of 241 patients (61.4%): patients with HSV presented a higher rate of recurrences (123 patients; 65.1%), followed by VZV (23 patients; 51.1%) and CMV (2 patients; 28.6%). The mean number of recurrences per year without antiviral therapy were: 3.8 episodes per year in the HSV group and 3.4 episodes per year in the VZV group, whereas during antiviral treatment, these rates were 2.3 episodes per year in the HSV group (P, 0.05) and 2.1 episodes per year in the VZV group (P, 0.05). The majority of patients had a number of recurrences ranging between 2 and 5 (40.7% in HSV group, 33.3% in VZV, and 14.3% in CMV), and only a small percentage of patients had a more aggressive course of the disease with more than 5 recurrences.	Recurrences	The study describes a high rate of recurrences of the disease despite long-term antiviral therapy, which led to a higher rate of ocular complications.
Nalcacioglu-Yüksekkaya P, Ozdal PC, Teke MY, Kara C, Ozturk F. Presumed herpetic anterior uveitis: a study with retrospective analysis of 79 cases. <i>Eur J Ophthalmol</i> . 2014;24(1):14-20.	2014	Retrospective study	4	79 eyes of 77 patients	Presumed herpetic anterior uveitis	no	<b>Oral antiviral therapy (acyclovir or valacyclovir)</b> , anti-inflammatory treatment ( <b>topical prednisolone acetate</b> ), topical mydriatic agents (tropicamide 1%, cyclopentolate 1%)	There was no recurrence in 54 (68.4%) eyes during the follow-up period while 25 (31.6%) eyes showed at least one relapse. Two attacks were seen in 17 (68%) eyes and 3 attacks in 8 (32%) eyes during the follow-up period. Of the 25 recurrent attacks, 13 (52%) were observed in eyes with AU only and 12 (48%) in eyes with keratouveitis.	-	Although characterized by recurrent inflammatory attacks, the visual prognosis is favorable if treated adequately. Long-term prophylactic antiviral therapy should be considered especially in patients <50 years old.

							<p>eyedrops), and antiglaucomatous therapy (topical beta-blockers, alpha-adrenergic agonists, topical or oral carbonic anhydrase inhibitors) as required. Once the inflammation was under control, the topical corticosteroids and oral antiviral treatment were gradually tapered and discontinued within 3-6 months. Cases developing a recurrence after the cessation of treatment were started on a large dose of topical corticosteroids that was tapered in 6 to 12 months (alternate days, every 3 days, every week) and oral acyclovir was continued at 200 mg per day for a year. <b>Long-term</b> (more than 12 months) <b>oral antiviral and topical corticosteroid</b> treatment were used in 9 (11.4%) eyes.</p>			
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Rodriguez A, Power WJ, Neves RA, Foster CS. Recurrence rate of herpetic uveitis in patients on long-term oral acyclovir. <i>Doc Ophthalmol.</i> 1995;90(4):331-340.	1995	Retrospective study	4	20	HSV anterior uveitis	yes	13 patients (group A) treated prophylactically with long-term systemic acyclovir (600-800 mg/day) and compared with 7 patients with no prophylactic therapy (group B).	The mean follow-up time of patients on long-term oral acyclovir was 26.0 months. In this group, only one patient experienced a single recurrent episode of uveitis while on 600-800 rag/day of acyclovir therapy; two additional patients had recurrence within 16.2 months after the acyclovir dose was tapered below 600 mg/day. In striking contrast, 16 recurrences occurred in the 7 patients of group B (p<0.05). There was a significant difference (/9<0.05) in the mean recurrence-free interval between patients in group A (24.6 months) and those in group B (3.4 months).	Recurrence rate of herpetic uveitis	The long-term use of oral acyclovir may be of benefit in the prevention of recurrences, and hence may reduce the blinding complications of this disease.
Uchoa UB, Rezende RA, Carrasco MA, Rapuano CJ, Laibson PR, Cohen EJ. Long-term acyclovir use to prevent recurrent ocular herpes simplex virus infection. <i>Arch Ophthalmol.</i> 2003;121(12):1702-1704.	2003	Retrospective study	4	40 patients (18 group 1, 22 group 2)	Recurrent ocular HSV infection, including iritis	yes	400 mg oral acyclovir twice a day for at least 12 months - control group (1)-, for at least 18 months (group 2) without discontinuing treatment during the follow up	33% in group 1 and 18% in group 2 had HSV recurrence during 12 month treatment period where both groups were using acyclovir. During the following 6 months when only group 2 were using acyclovir, 78% had recurrence in group 1 and 36% in group 2.	Recurrences were classified including iritis	Lon term oral acyclovir use seems to remain effective in decreasing the number of ocular hepres simplex virus recurrences beyond 12 months

STUDY	Year	Study design	Level of evidence	Number of patients	Diagnosis	Control group (yes/no)	Treatment	Treatment outcome	Treatment outcome definition	Conclusions
Ameys C, Sundmacher R, de Clercq E. Topical BVDU plus low-dosage steroids in the treatment of chronic relapsing zoster keratouveitis. A pilot study. <i>Graefes Arch Clin Exp Ophthalmol.</i> 1989;27(2):118-122.	1989	Pilot study	-	5	zoster keratouveitis	no	Topical bromovinyldeoxy-uridine (BVDU) 0.1% eyedrops plus low-dosage steroids (dexamethasone 0.1% eyedrops) was conducted in five patients with chronic zoster keratouveitis, who had previously received topical acyclovir (ACV) plus steroids.	Complete resolution of the inflammatory reaction associated with relapsing varicella-zoster keratouveitis, if topical BVDU was combined with topical steroid treatment. However, the addition of BVDU to steroids did not completely solve the therapeutic problem of chronic relapsing varicella-zoster keratouveitis.	Course of uveitis	In all cases, BVDU (plus steroids) was found to be superior to ACV (plus steroids). Yet BVDU was not able to keep the patients from having chronic relapsing varicella-zoster keratouveitis. Persistence and low-grade multiplication of the varicella-zoster virus in peripheral eye tissues during the chronic carrier stage. might be the cause - this chronic carrier status could be obviated by vigorous antiviral treatment during the acute phase of the illness.
Aylward, G., Clau�e, C., Marsh, R. <i>et al.</i> Influence of oral acyclovir on ocular complications of herpes zoster ophthalmicus. <i>Eye</i> 8, 70–74 (1994).	1994	retrospective, comparative, case-control study	4	419	herpes zoster ophthalmicus	yes	Oral dose of ACV 800 mg, five times a day for 7 days. Pts treated with oral ACV 77 (18%), of which 42 patients (10%) received 'adequate' treatment as above.	No difference in the rate of ocular complications between treated and untreated patients could be detected.	Ocular complications	Oral ACV as currently prescribed has little or no preventive effect on the ocular complications of ophthalmic zoster.

Cobo LM, Foulks GN, Liesegang T, et al. Oral acyclovir in the treatment of acute herpes zoster ophthalmicus. <i>Ophthalmology</i> . 1986;93(6):763-770.	1986	prospective, longitudinal, randomized, double-masked, placebo-controlled trial	2	71	herpes zoster ophthalmicus - anterior uveitis was present in seven patients on entry, four acyclovir-treated and three placebo-treated.	yes	Acyclovir 600 mg five times per day over a ten-day period (36 patients) vs placebo	Acyclovir not only provides a beneficial prophylactic effect with respect to anterior uveitis, but the maximum severity scores of this event indicate more severe disease in placebo-treated patients. Keratitic precipitates are significantly reduced in incidence by acyclovir treatment.	Frequency, severity, and duration of ocular complications	Anterior segment ocular inflammatory sequelae of HZO were the most common and protracted ocular complications encountered. It is in this group that a beneficial prophylactic effect of acyclovir was most dramatically demonstrated. Acyclovir, administered at a dose of 600 mg, five times per day for ten days, has a positive effect on the acute phase of the disease and is of prophylactic benefit with respect to some of the more common ocular complications of the disease.
Colin J, Prisant O, Cochener B, Lescale O, Rolland B, Hoang-Xuan T. Comparison of the efficacy and safety of valaciclovir and acyclovir for the treatment of herpes zoster ophthalmicus. <i>Ophthalmology</i> . 2000;107(8):1507-1511.	2000	multicenter, randomized, double-masked study	2	110	herpes zoster ophthalmicus	no	Patients randomized to the valaciclovir group received two 500-mg tablets of valaciclovir three times daily and one tablet of placebo twice daily. Patients in the acyclovir group received one 800-mg tablet of acyclovir five times daily and one tablet of placebo three times daily for 7 days (n = 56 in the valaciclovir group; n = 54 in the acyclovir group).	Ocular complications of herpes zoster ophthalmicus were similar in the valaciclovir and acyclovir treatment groups, in particular uveitis 13% and 17%, respectively. The long-term outcomes of these ocular complications were favorable and similar in both treatment groups.	Frequency, severity, and duration of ocular complications	Valaciclovir is as effective as acyclovir in preventing ocular complications of herpes zoster ophthalmicus.

Harding SP, Porter SM. Oral acyclovir in herpes zoster ophthalmicus. Curr Eye Res. 1991;10 Suppl:177-182.	1991	placebo controlled trial	3	46	herpes zoster ophthalmicus	yes	oral acyclovir, 800mg 5 times daily, for 10 days. Intraocular involvement was treated with topical acyclovir ointment, steroids and mydriatics.	<p>Intraocular involvement occurred less frequently in patients receiving oral acyclovir (7 of 23; 30%) than in those given placebo (10 of 19; 53%) (22% difference, 95% CI - 0.7% to 51%, power 45%). However this difference was not statistically significant (p=0.17). Meantime to first ocular involvement was 5.9 days (SD=3.23; range 3-11) in the acyclovir group and 22.0 days (SD=48.22; range 3-159) in the placebo group; this difference did not reach statistical significance (p=0.17). All 17 patients with ocular complications developed anterior uveitis. All were less severe in acyclovir patients but the differences were not statistically significant (uveitis p=0.06; keratitis p=0.06; scleritis p=0.22). The frequency of active intraocular complications at 6 months was lower in the acyclovir group. 1 of the 20 patients (5%) in the acyclovir group who were examined at 6 months had chronic uveitis while 8 of 19 (42%) in the placebo group were similarly affected (difference 37%, 95% CI 13% to 61%, power 92%). This difference was statistically significant (p=0.01). To correct for this the data was further analysed by excluding all</p>	Frequency, severity, and duration of ocular complications	Oral acyclovir appears to modify the disease process in herpes zoster ophthalmicus, and especially to protect against long term ocular complications.
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								patients who received topical steroids. There remained a statistically significant difference in favour of the acyclovir group (p=0.023).		
Herbert CP, Buechi ER, Piguet B, Zografos L, Fitting P. High-dose oral acyclovir in acute herpes zoster ophthalmicus: the end of the corticosteroid era. <i>Curr Eye Res.</i> 1991;10 Suppl:171-175.		retrospective	4	48	acute phase of herpes zoster ophthalmicus	no	oral ACV (5 X 800 mg/day) for at least 7 days associated with topical ACV. Steroids were not given unless severe uveitis occurred.	Ocular involvement occurred in 67% of ACV-treated cases, a rate comparable to the untreated group (59%) and to the literature (71%). However, rate of severe long term complications of ACV treated was minimal (4%) when compared to non-treated retrospective group (21%)	Long term ocular complications	This study confirms the efficacy of oral acyclovir against long term ocular complications.

<p>Hoang-Xuan T, Büchi ER, Herbort CP, et al. Oral acyclovir for herpes zoster ophthalmicus. <i>Ophthalmology</i>. 1992;99(7):1062-1071.</p>	1992	bicentric, prospective, randomized, double-masked study	2	86	herpes zoster ophthalmicus	no	<p><b>oral acyclovir</b> (800 mg 5 times daily), either for 7 days (plus 7 days oral placebo) or for 14 days.</p>	<p>Anterior uveitis (cells, flare, and/or keratic precipitates), which was detected in 14 patients at entry (16.3%), was noted in 23 patients (26.7%) on day 14. Prompt treatment with oral acyclovir reduces the incidence and severity of late ocular manifestations. There were no significant differences between groups 1 and 2 in either the numbers of patients experiencing complications or the incidences of specific complications. At 6 months, late ocular inflammatory complications were seen in 29.1% of our 86 patients, versus 50% to 71% of untreated patients described by others.</p>	Frequency, severity, and duration of ocular complications	<p>Ocular complications showed no significant differences between the groups, suggesting that a 7- day course of treatment was sufficient. This study confirms the efficacy of oral acyclovir against ocular complications.</p>
<p>Kahloun R, Attia S, Jelliti B, et al. Ocular involvement and visual outcome of herpes zoster ophthalmicus: review of 45 patients from Tunisia, North Africa. <i>J Ophthalmic Inflamm Infect</i>. 2014;4:25.</p>	2014	Retrospective	4	51 eyes of 45 patients	herpes zoster ophthalmicus, including keratouveitis (31.4%), and isolated anterior uveitis (AU) (29.4%)	no	<p>All patients were treated with <b>intravenous acyclovir</b> 10 mg/kg 3 times daily or <b>oral valacyclovir</b> 3 g/day for 7 to 10 days. <b>Topical corticosteroids</b>, cycloplegics, topical antibiotics, topical beta-blockers, oral carbonic anhydrase inhibitors, and analgesics were prescribed when indicated. Patients with anterior uveitis (AU) received</p>	<p>Mean final BCVA was 20/32; it was <math>\geq</math> 20/40 in 78.4% of the eyes.</p>	Ocular involvement and visual outcome of HZO	<p>The overall visual outcome is good, with about three quarters of the treated patients maintaining VA of 20/40 or better.</p>

							antiviral therapy for 8 to 14 weeks along with <b>topical corticosteroid</b> therapy tapering			
McGill J, Chapman C. A comparison of topical acyclovir with steroids in the treatment of herpes zoster keratouveitis. <i>Br J Ophthalmol.</i> 1983;67(11):746-750.	1983	randomized, double-masked, code controlled trial	2	40	keratouveitis caused by herpes zoster	no	<b>Topical acyclovir</b> 5 times a day or <b>betamethasone</b> 5 times a day	Topical acyclovir was significantly superior to topical steroids in terms of treatment duration (75 days to 280 days), with no recurrences after the patients were weaned off treatment; there was a 63% recurrence rate in the steroid group. If recurrences occurred in the steroid group, other parts of the eye not initially affected were also involved. Treatment of such recurrences was more difficult than treatment of the initial attack.	Clinical signs, ocular involvement and recurrences	The prominent feature of this trial has been the resolution of the ocular signs of herpes zoster infection in the acyclovir treated group without any recurrences once treatment was tapered off and stopped. In the steroid-treated group the average duration of treatment was significantly longer. The results reported here support the theory that if topical steroids are used in the treatment of herpes zoster ophthalmicus, treatment should be continued on low-dose maintenance therapy for some considerable time after the resolution of the signs in order to prevent reactivation of the disease.
Miserocchi E, Waheed NK, Dios E, et al. Visual outcome in herpes simplex virus and varicella zoster virus uveitis: a clinical evaluation and comparison.	2002	Retrospective comparative study	4	64	40 with HSV uveitis and 24 patients with VZV uveitis	no	Most patients were treated with <b>systemic acyclovir</b> (87% of HSV and 79% of VZV patients) and <b>topical steroids</b> (95% of HSV	The percentage of eyes that were legally blind at end of follow-up was comparable (HSV, 20%; VZV, 21%). The visual outcome was similar in the studied populations.	Clinical presentation of the disease, ocular complications, visual acuity, surgical	Treatment modalities selected were generally similar in the two groups, although periocular and systemic steroids were required more frequently in

Ophthalmology. 2002;109(8):1532-1537.							and 87% of VZV patients)		and medical treatments needed	HSV patients (60% versus 25%; P 0.01).
Miserochi E, Fogliato G, Bianchi I, Bandello F, Modorati G. Clinical features of ocular herpetic infection in an Italian referral center. Cornea. 2014;33(6):565-570.	2014	retrospective study	4	241	189 (78.4%) patients had HSV, 45 (18.7%) had VZV, and 7 (2.9%) had CMV infection. In the HSV and VZV groups anterior uveitis 33.3% and 28.9%, respectively.	no	<b>Oral acyclovir or valacyclovir</b> was given in the acute stages of uveitis, and daily doses were maintained <b>prophylactically</b> to prevent recurrences in most instances. <b>Antiviral prophylaxis</b> consisted of the use of acyclovir (400 mg twice daily) or valacyclovir (500 mg everyday) for at least 1 year.	Overall recurrence of eye disease was diagnosed in 148 of 241 patients (61.4%): patients with HSV presented a higher rate of recurrences (123 patients; 65.1%), followed by VZV (23 patients; 51.1%) and CMV (2 patients; 28.6%). The mean number of recurrences per year without antiviral therapy were: 3.8 episodes per year in the HSV group and 3.4 episodes per year in the VZV group, whereas during antiviral treatment, these rates were 2.3 episodes per year in the HSV group (P, 0.05) and 2.1 episodes per year in the VZV group (P, 0.05). The majority of patients had a number of recurrences ranging between 2 and 5 (40.7% in HSV group, 33.3% in VZV, and 14.3% in CMV), and only a small percentage of patients had a more aggressive course of the disease with more than 5 recurrences.	Recurrences	The study describes a high rate of recurrences of the disease despite long-term antiviral therapy, which led to a higher rate of ocular complications.
Neoh C, Harding SP, Saunders D, et al. Comparison of topical and oral acyclovir in early herpes zoster	1994	multicentre open randomised	2	57	herpes zoster ophthalmicus	no	<b>topical acyclovir</b> ointment or 800 mg <b>oral acyclovir</b> , both 5 times daily for 7 days	Patients receiving ointment were significantly more likely to have ocular complications (<0.02) and anterior uveitis was	Ocular complications, severity and recurrences	In spite of its apparently better penetration topical acyclovir appears to have no prophylactic value in the management of early HZO.

ophthalmicus. Eye (Lond). 1994;8 ( Pt 6):688-691.								significantly more frequent (<0.01) and severe (<0.01).		
Nithyanandam S, Stephen J, Joseph M, Dabir S. Factors affecting visual outcome in herpes zoster ophthalmicus: a prospective study. Clin Exp Ophthalmol. 2010;38(9):845-850.	2010	prospective, longitudinal, observational study	2	64	herpes zoster ophthalmicus - 31 had uveitis of varying severity; 27 had mild to moderate uveitis and 4 had severe uveitis	no	All patients received both <b>systemic and topical acyclovir</b> . Oral acyclovir in the dose of 800 mg, 5 times daily, for 7–10 days and topical acyclovir 3% ointment 5 times daily. <b>Topical steroids</b> were prescribed for uveitis.	Overall visual outcome was good, with 36/64 (56.3%) patients having a visual acuity of 6/6 or better. Mild visual loss occurred in 22/64 (34.3%), moderate loss in 3/64 (4.7%) and severe loss in 3/64 (4.7%); moderate to severe visual loss was due to severe uveitis in 2 pts. Uveitis was found to be the best predictor of visual loss in HZO on multivariate analysis.	Best-corrected visual acuity at 6 months' follow up	The overall visual outcome is good in HZO patients receiving antiviral therapy. Anterior uveitis was found to be strong predictors of visual loss in HZO.
Severson EA, Baratz KH, Hodge DO, Burke JP. Herpes zoster ophthalmicus in olmsted county, Minnesota: have systemic antivirals made a difference?. Arch Ophthalmol. 2003;121(3):386-390.	2003	retrospective study	4	323	acute herpes zoster ophthalmicus	no	A total of 202 patients had been treated with <b>systemic antivirals</b> , and 121 had not.	The cumulative probability of developing a defined adverse outcome was lower in the treated group. No significant differences in development of uveitis was seen between the untreated and treated groups (uveitis 22.3% in untreated and 17.2% in treated).	Ocular sequelae due to herpes zoster ophthalmicus	Our data indicate that systemic antiviral therapy for acute HZO may decrease the probability of subsequent visual loss and other adverse outcomes.
Szeto SK, Chan TC, Wong RL, Ng AL, Li EY, Jhanji V. Prevalence of Ocular Manifestations and Visual Outcomes in Patients With Herpes Zoster Ophthalmicus. Cornea. 2017;36(3):338-342.	2017	retrospective review	4	259	herpes zoster ophthalmicus, including 46 patients with anterior uveitis (17.8%)	no	<b>Oral antiviral</b> medications (acyclovir or famciclovir) were prescribed in 250 (96.5%) patients	The best-corrected visual acuity was 6/12 or worse in 42.7% of the patients at the time of presentation and in 58.7% of the patients after disease resolution. Visual loss was noted in 12.4% of patients. Anterior uveitis was not significantly associated with visual loss (P . 0.064). All cases resolved with treatment except 1 patient who developed relapse of anterior uveitis after stopping topical steroids.	Ocular manifestations and visual outcomes in patients with herpes zoster ophthalmicus	With prompt oral antiviral therapy and referral, the average duration of HZO of our patients was short, and only 1 patient had recurrent anterior uveitis and persistently elevated intraocular pressure. We believed that the short duration between disease onset and administration of antiviral therapy in most (96.5%) of our patients might explain the low rate of

										chronic zoster disease in the patients.
Thean JH, Hall AJ, Stawell RJ. Uveitis in Herpes zoster ophthalmicus. Clin Exp Ophthalmol. 2001;29(6):406-410.	2001	retrospective case study	4	34	herpes zoster ophthalmicus and secondary uveitis	no	Twenty-two patients were given oral antiviral therapy, of which 19 were treated with aciclovir, one was treated with famciclovir and two with valciclovir. Seven patients were on topical aciclovir	Sixty-seven per cent of patients developed uveitis within 1 week from the onset of the HZO rash. Twenty-three patients (67.6%) had only one episode of uveitis. One patient presented with a recurrence 40 years after her initial episode. The three patients who had bilateral ocular involvement experienced a total of six uveitis episodes each with an average of three episodes per eye. A total of 45 of a cumulative 67 uveitis episodes (68%) recorded in the 34 patients lasted 2 months or less (Fig. 3). Five of 67 episodes (7%) lasted for more than 12 months. These patients displayed a chronic relapsing pattern whereby the uveitis flared up every time an attempt at weaning topical steroids was made. The visual loss in the five patients was not directly related to the uveitis	Relationship between onset of rash and uveitis, duration of uveitis and rate of recurrences	-

<p>Tyring S, Engst R, Corriveau C, et al. Famciclovir for ophthalmic zoster: a randomised aciclovir controlled study. <i>Br J Ophthalmol.</i> 2001;85(5):576-581.</p>	<p>2001</p>	<p>Randomised, double masked controlled trial</p>	<p>2</p>	<p>454</p>	<p>herpes zoster ophthalmicus</p>	<p>no</p>	<p>Oral famciclovir 500 mg three times daily or oral aciclovir 800 mg five times daily for 7 days.</p>	<p>The percentage of patients who experienced one or more ocular manifestations was similar for famciclovir (142/245, 58.0%) and aciclovir (114/196, 58.2%) recipients, with no significant difference between groups (OR 0.99; 95% CI 0.68, 1.45). The percentage of patients who experienced severe and non-severe manifestations was similar between groups, with no significant difference. The prevalence of individual ocular manifestations was comparable between groups. There was no significant difference between groups for visual acuity loss.</p>	<p>Ocular manifestations, severe manifestations and non-severe manifestations; loss of visual acuity</p>	<p>Famciclovir 500 mg three times daily was well tolerated and demonstrated efficacy similar to aciclovir 800 mg five times daily.</p>
<p>Zaal MJ, Völker-Dieben HJ, D'Amato J. Visual prognosis in immunocompetent patients with herpes zoster ophthalmicus. <i>Acta Ophthalmol Scand.</i> 2003;81(3):216-220.</p>	<p>2003</p>	<p>prospective observational cohort study</p>	<p>3</p>	<p>73</p>	<p>herpes zoster ophthalmicus</p>	<p>no</p>	<p>All patients received a 7–14-day course of systemic aciclovir treatment</p>	<p>32 anterior uveitis at 1 week follow up, 13 at 1 months, 5 at 2 months, 0 at 6 months. Ophthalmic herpes zoster led to a variety of transient inflammatory reactions within the anterior eye segment of the involved side in 46 patients (63%), but did not seriously compromise their ultimate visual outcome. Mild to moderate visual loss, with corrected VA between 0.3 and 0.8, was found in 17 patients at 1 month (23%), in 10 patients at 2 months (14%) and in seven patients at 6 months follow-up (10%). None of the patients developed visual loss with a corrected VA of less than 0.3.</p>	<p>Visual outcome</p>	<p>Functional vision was retained in all ophthalmic zoster patients referred to the ophthalmologist in the acute phase of the disease by vigorous antiviral treatment</p>

