Patient with recurrent VZV keratitis

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Case

- 36 year old female presents to adult immunodeficiency clinic
- Healthy until **2013** when she had an episode of **ITP** for which she received prednisone for 2 weeks with good response
- In **August 2014** she had a clinic diagnosis of mononucleosis
- In **November 2014** she was first diagnosed **herpes zoster ophthalmicus with epithelial keratitis** via clinical exam of vesicular rash covering the left upper eyelid and slit lamp
- Initially treated with Valtrex 1g qday for 2 weeks and prednisolone forte eye drops BID. Rash resolved in 2 weeks, but ocular pain persisted

Case

- Her ocular and oral steroids would increase as her post herpetic neuralgia would flare
- In **Feb 2015**, she developed worsening left sided eye pain and decreased vision and is seen by Hopkins Ophthalmology.
- Diagnosed with **recurrent VZV** in her left eye via slit lamp exam and restarted on Valtrex 1 g **BID** for 2 weeks, while continuing on ocular steroids. Valtrex 1 gram has been continued indefinitely.
- In **March 2015**: she had similar symptoms of worsening eye and facial pain, and reduced vision. Oral and eye drop steroids were increased. Continued on Valtrex 1g qday
- In **October 2015**, similar worsening symptoms, so her Valtrex dose was increased to 1 g **BID** dosing

Past Medical History

Infection History

- Chickenpox as a child (age 7)
- EBV mononucleosis as a child (age 10)
- Oral hairy leukoplakia (age 11)
- Frequent "Strep throat" as a child
- Frequent sinus infections in teens
- Swab + flu about every 3 years, started around 22 years of age
- ?CMV/EBV Mononucleosis (8/2014)
- VZV epithelial keratitis (11/2014)
- Stomach flu last December, kept over night in ED
- + skin warts on her fingers - removed and didn't return

No pneumonia
No bacteremia
No meningitis
No recurrent skin infections
No HPV history
No abnormal paps or HPV
No fungal infections

Family History

- Father pancreatic cancer, deceased
- Brother brain tumor (age 5), deceased
- Mother hx of HTN, DM
- Sister hx ITP
- Paternal grandfather Prostate/colon ca
- Maternal grandfather "colon disease"
- Maternal grandmother breast ca, deceased

Case - Labs

Lab	Result
Absolute CD8	588 (normal), 19.6%
Absolute CD4	1701 (high), 56.7%
Absolute CD3	2322 (normal), 77.4%
CD3+CD25+ Lymphocytes	666 (high), 22.2%
Mitogen testing: PHA, Con A and PWM	PHA: 291829 (53000 - 200000 CPM) ConA: 213139 (49500 - 129000 CPM) PMW: 210626 (29,100-125,000 CPM)
CD3- CD56/16+ cells	216/uL, normal, 7.2%
NK cell function, cytotoxicity measure, LU30 = # lytic sets w/in prep of 10 million lymphocytes.	11/3/15**: 3 LU30, low** 1/4/16: **3 LU30 low** 2/11/16: **4 LU30 low**

Lab	Result
Immunoglobulin levels	normal
Varicella - zoster IgG	>4000
Varicella - zoster IgM	< 0.91 (neg)
Tetanus IgG Ab	2.39
Diphtheria Ab	0.51
HIV	negative

Case

- Skin rash has not returned since the initial symptoms in November 2014; she had slight rash in January 2015 but not severe.
- When she has tried to taper off of the oral or ocular steroids, her pain typically increases
- Her current regimen is Valtrex 1g BID, prednisolone forte BID, Wellbutrin 300mg/day, and Gabapentin 1200mg BID for pain control
- Other therapeutic considerations: interferon or IL-2
- She is followed by immunology, ophthalmology, and infectious disease