Retina specialists who do not dedicate their careers to uveitis may not be aware of the most recent data related to the condition. What better place to explore this uncommon pathology than in the cover series on less common diseases in this issue of *Retina Today*?

*RT* sat down with Steven Yeh, MD, the M. Louise Simpson Associate Professor and Director of the Uveitis and Vasculitis Section at the Emory Eye Center for a recap of the goings-on in uveitis. Consider it a primer for those of you who don’t live and breathe uveitis.

**Retina Today:** Are corticosteroids still a common therapy for patients with uveitis?

**Steven Yeh, MD:** Yes, and our understanding of corticosteroid delivery has advanced in the past few years.

The US National Eye Institute funded the POINT study, which compared the intravitreal dexamethasone implant 0.7 mg (Ozurdex, Allergan), 4 mg intravitreal preservative-free triamcinolone acetonide (Triesence, Alcon), and 40 mg periocular triamcinolone acetonide (Kenalog, Bristol-Myers Squibb) for the treatment of macular edema associated with uveitis. The study investigators found that patients in the intravitreal injection groups showed better reduction of central subfield thickness (CST) than patients in the periocular injection group. Patients in the periocular triamcinolone group saw a 23% reduction in CST at 8 weeks, and patients in the intravitreal triamcinolone and intravitreal dexamethasone implant group saw CST reduced by 39% and 46%, respectively, at that interval.

Patients in the intravitreal injection groups, however, had a greater increase in mean IOP compared with patients in the periocular group.

**RT:** How concerning are those IOP elevations?

**Dr. Yeh:** Fortunately, we have very good therapies for the treatment of elevated IOP. It’s a balance between the effectiveness of the therapy and ensuring that optic nerve damage does not occur. Because patients were able to be treated with topical medications,
we were less concerned than if patients had needed surgery to control IOP.

RT: Adalimumab (Humira, AbbVie) is a new player in the uveitis space. What can you tell us about it?

Dr. Yeh: There are a number of systemic therapies we’ve used for years to treat noninfectious uveitis. These include immunosuppressive agents, such as methotrexate and mycophenolate mofetil (CellCept, Genentech), as well as corticosteroids.

We now have high-level data on the anti–tumor necrosis factor alpha inhibitor adalimumab for noninfectious uveitis, giving our patients a new option for systemic treatment. This is particularly important if a patient has other systemic autoimmune conditions that have led to the development of his or her uveitic condition.

RT: The intravitreal flucinolone acetonide implant 0.18 mg (Yutiq, EyePoint Pharmaceuticals) has also entered the field.

Dr. Yeh: Yes, it has, and with some compelling data supporting its efficacy. Jaffe et al evaluated 129 patients with chronic noninfectious uveitis in a randomized, prospective, double-masked, sham-controlled, 3-year phase 3 clinical trial. Patients were randomly assigned in a 2:1 ratio to receive the intravitreal flucinolone acetonide implant 0.18 mg or sham. Patients in the treatment group showed significantly lower disease recurrence rates compared with control patients at 6 months (28% and 91%) and 12 months (38% and 98%; P < .001 for both).

Fewer recurrences per study eye, lower incidence of a 15-letter or more decrease in BCVA, and reduced need for systemic and local uveitis adjunctive treatments were observed in the treatment group as well.

Patients in the treatment group experienced higher rates of cataract and the use of IOP-lowering medications was similar in the two groups.

RT: How is the implant delivered?

Dr. Yeh: It’s administered in the office via a 25-gauge injector. Vitreoretinal surgeons will be comfortable administering it. It differs from the flucinolone acetonide intravitreal implant 0.59 mg (Retisert, Bausch + Lomb), which must be implanted in the OR.

RT: How does the suprachoroidal space fit into the uveitis treatment decision tree?

Dr. Yeh: That is where the phase 3 PEACHTREE trial comes in. In PEACHTREE, researchers evaluated patients with macular edema associated with noninfectious uveitis. Patients were randomly assigned to receive Clearside Biomedical’s proprietary formulation of corticosteroid triamcinolone acetonide (Xipere) or sham. Suprachoroidal CLS-TA therapy (ie, proprietary preservative-free triamcinolone acetonide) was administered via the suprachoroidal space.

At 6 months, a significantly greater proportion of patients in the treatment arm, compared with the sham arm, demonstrated an increase of at least 15 ETDRS letters (47% vs 16%; P < .001). Patients in the treatment arm also showed significantly improved macular edema and 85% of patients in the treatment arm did not require rescue therapy.

RT: When should our readers expect to hear more about Xipere?

Dr. Yeh: The US FDA accepted the application is targeted for October 2019.

RT: Retina is gearing up for fall and winter meeting season. What talks are you expecting to hear from the podium?

Dr. Yeh: I would like to see the final results of the PEACHTREE study and look forward to long-term follow-up data from the trial by Jaffe et al evaluating the flucinolone acetonide implant 0.18 mg.

The FAST trial, which is led by Nisha Acharya, MD, at University of California, San Francisco, is comparing methotrexate with mycophenolate mofetil for the treatment of noninfectious uveitis (NCT01829295). This trial will provide our field with level 1 evidence of the efficacy of these two drugs that have been used for years to treat this disease.

On the imaging landscape, I am curious to see data emerge about the roles played by ultra-widefield imaging and OCT angiography for patients with noninfectious uveitis. Metagenomic deep sequencing, too, will be important for how and we detect and eventually treat infectious uveitis syndromes.


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