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Summary of the American Uveitis Society Winter Symposium in January 2002 on Cataract Surgery and OID Standards of Care that Still Stand Strong in 2026 plus others based on Decades of Our Research

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The American Uveitis Society (AUS) Winter Symposium, held in Vail in January 2002, focused on key clinical and surgical challenges in the management of complex ocular inflammatory diseases. Major topics included assessing standards for cataract surgery in patients with uveitis and examining the role of pars plana vitrectomy in treating selected complications.

It was used to evaluate the quality of publications on cataract surgery in patients with a history of uveitis, with the aim of assessing the strength of evidence supporting key principles. The following principles were considered to be strongly supported by evidence published in peer-reviewed journals:

1. Control of inflammation for a substantial period of time pre-operatively is critical for a good outcome.
2. Control of inflammation post-operatively is clearly critical for a good outcome.
3. An intraocular lens implant can be part of a reasonable surgical plan for the patient with uveitis and cataract, **provided** thoughtful considerations are given to patient selection, i.e., not all patients are good candidates for a lens implant.
4. Young patients with juvenile idiopathic arthritis-associated uveitis with cataract should not be routinely implanted with a lens implant.
5. Para plana vitrectomy **may** be therapeutic for cystoid macular edema associated with uveitis; seven studies support this idea.
6. Pars plana vitrectomy **can** be therapeutic for control of uveitis in patients with difficult to control uveitis; fourteen published studies support this idea, three papers in patients with pars planitis.

7. Cataract development as a consequence or a complication of pars plana vitrectomy appears to be related to the aggressiveness of the vitrectomy and to the patient age, with younger age being associated with greater prevalence of developing cataract.
8. The rate of retinal detachment seen in the published studies relating to pars plana vitrectomy for uveitis therapy was 5%.
9. **Prevention** of cystoid macular edema **may** be associated with earlier rather than later vitrectomy in the patient with intermediate or posterior uveitis.
10. Appropriate reasons for vitrectomy in the care of the patient with uveitis include:
    1. Visually significant vitreal opacification
    2. Presence of a cyclitic membrane
    3. Cystoid macular edema
    4. Attempts at controlling the uveitis
    5. For diagnostic purposes

Other key considerations based on our experience and research over the past two decades:

1. Cataract management in uveitic eyes is challenging and often results in less predictable postoperative outcomes compared with surgery for non-uveitic, age-related cataracts.
2. More recent studies have demonstrated a substantial decline in both intraoperative and postoperative complications, along with notable improvements in visual outcomes following uveitic cataract surgery. These gains are largely attributed to improved perioperative control of inflammation with immunomodulatory therapies, advances in minimally invasive microsurgical techniques, and the availability of biocompatible intraocular lens (IOL) materials.
3. Multiple studies indicate that the key determinant of favorable visual outcomes after cataract extraction is maintaining a quiescent uveitic eye for 3-6 months preoperatively, as this reduces the risk of postoperative inflammation and cystoid macular edema (CME).
4. Meticulous control of preoperative inflammation and any underlying systemic disease is essential for successful cataract surgery in patients with uveitis. Preoperative inflammation can be managed with systemic corticosteroids, biologic agents, and steroid-sparing immunosuppressive therapies. Several protocols have been proposed to optimize uveitic eyes before surgery. A commonly used regimen involves initiating oral

prednisolone two weeks prior to surgery with slow tapering (every 2 weeks) after surgery, in addition to ongoing immunosuppressive therapy.

5. In patients with infectious causes—such as ocular toxoplasmosis or herpes simplex uveitis—preoperative antiviral or antiparasitic prophylaxis is recommended, as surgery may precipitate a recurrence of infection.
6. Excessive postoperative inflammation is one of the most common complications of cataract surgery in uveitic eyes. Poorly controlled inflammation can lead to significant sequelae that adversely affect surgical outcomes, including cystoid macular edema (CME), posterior capsule opacification (PCO), posterior synechiae (PS), glaucoma, intraocular lens (IOL) decentration, epiretinal membrane formation, ciliary membrane formation, and hypotony. Therefore, patients with uveitis require meticulous postoperative management and close follow-up.
7. Intraocular lens (IOL) implantation in juvenile idiopathic arthritis (JIA)–associated uveitis is now considered a viable option for visual rehabilitation, provided that inflammation is well controlled with biologic therapies and appropriate surgical techniques are used. Although previously regarded as high risk, advances in surgical methods and immunomodulatory therapy (IMT) therapy have reduced complications such as secondary glaucoma and membrane formation, leading to improved visual outcomes.
8. Compared with the AUS Winter Symposium in 2002, advances in diagnostic modalities and the introduction of new therapeutic agents—including biologic response modifiers, small-molecule agents, and intravitreal corticosteroid implants—have significantly changed the management of uveitis-associated cystoid macular edema (CME). Today, pars plana vitrectomy is generally considered a last-resort therapeutic option in refractory uveitis patients and those with CME. An exception may be pars planitis without retinal vasculitis, in which pars plana vitrectomy can be considered earlier in the disease course and may have a curative role.