The Future of Therapy for Inflammatory Eye Diseases

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A research meeting was held in Munich, Germany in early September for three days to assess the current state-of-the-art and the near-term future of ocular pharmacology. One half day session of this six session meeting was devoted to anti-inflammatory therapy and various therapies used in the treatment of ocular inflammatory disease. While some promising prospects exist for novel agents that can more selectively affect certain components or pathways of the inflammatory cascade (e.g., oligonucleotide therapy, peptide therapy, monoclonal antibody therapy, and tolerization therapy), it was clear, as a result of multiple presentations, that, in fact THE FUTURE IS NOW! By this was meant that enormous progress has been made in successful treatment of previously blinding aggressive ocular inflammatory diseases over the past twenty-five years through the employment of immunosuppressive/immunomodulatory medications. Indeed, many previously blinding diseases, disease which were literally guaranteed to eventually blind a patient, are now imminently curable. Examples of such diseases include cicatricial pemphigoid, Mooren's ulcer, and certain forms of progressive uveitis. Indeed, even certain lethal systemic diseases with inflammatory ocular manifestations, such as Behcet's disease, Wegener's granulomatosis, and polyarthritis nodosa now not only can have the destructive ocular manifestations of the disease stopped, but can also have, through immunosuppressive chemotherapy, the life of the patient saved.

The pity is, as was vividly pointed out by speakers at this meeting, that the vast majority of the world's ophthalmology community are still held hostage by incorrect understandings of the risks of such therapy. Ophthalmologists often carry with them the misconceptions developed as a result of observing cancer chemotherapy patients during medical school, patients who developed virtually all of the potential side effects and complications of immunosuppressive chemotherapy. What they do not know, what they have not had experience observing, is the incredibly low prevalence of significant complications when such medications are used in the way that dermatologists, rheumatologists, and ocular immunologists use these drugs. For example, many ophthalmologists harbor the misconception that methotrexate therapy, just as alkylating agent therapy, is associated with sterility. Such is clearly not the case. Many ophthalmologists harbor the misconception that non-alkylating immunosuppressive chemotherapy for ocular inflammatory disease and rheumatologic disease and dermatologic disease is associated with an increased risk of malignancy later in life. Multiple publications in the rheumatologic and now in the ophthalmologic literature show that this is absolutely not the case.

Therefore, one of the biggest conclusions to emerge from this meeting was that attendees at the meeting should make larger efforts to re-educate the world's ophthalmologist community on the relative safety and extraordinary efficacy of conventional immunosuppressive chemotherapy for the care of patients with progressively blinding ocular inflammatory disease.