WHEN EQUAL IS NOT EQUAL

To help optimize outcomes for cataract surgery, a surgeon prescribes branded medications and educates patients about their important value over generics.

BY NATHAN M. RADCLIFFE, MD, AND WILLIAM B. TRATTLER, MD

The following article summarizes a video that features a question-and-answer session on the latest research and clinical data on the use of branded versus generic medications in ophthalmology and highlights the formulation differences and challenges faced by surgeons. This video is one of a four-part series and can be viewed in its entirety at http://eyetube.net.

Nathan M. Radcliffe, MD: We all work hard to be efficient while maintaining high standards for clinical performance. How do these two goals shape your approach to cataract surgery?

William B. Trattler, MD: The first thing we all need to consider is that our patients have very high expectations for cataract surgery. They expect to see very well, very quickly, with very little inconvenience. While I certainly look at cataract surgery in the context of time efficiencies in my practice, and I am mindful of factors such as my patients' finances, my top priority is to fulfill those high expectations. As a result, the first thing I do for all my patients is to establish how I can deliver the best visual outcomes and experience.

Dr. Radcliffe: As you focus on meeting cataract patients' high expectations, do you encounter an issue with using generic versus branded medications?

Dr. Trattler: The major issue with generic medications for cataract patients is that, in my experience, generic nonsteroidal anti-inflammatory drugs (NSAIDs) have more toxicity on the ocular surface. A few examples I have noted from personal experience include generic diclofenac formulations and, more recently, some generic formulations of ketorolac and bromfenac (Figure 1).

To help my patients achieve the clear vision they expect after surgery, I need to ensure patients have a healthy ocular surface. I have seen patients develop poor vision following a successful surgery because they used generic medications (case 1) so for this reason, I strongly recommend that my patients use branded medications.

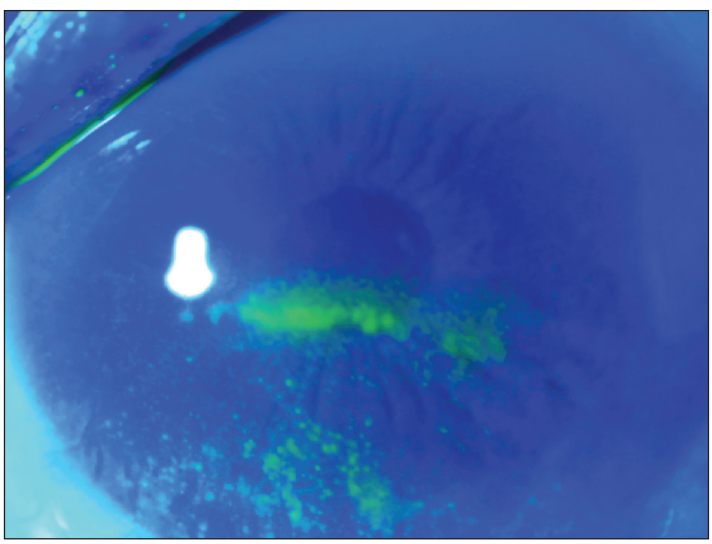

Figure 1. A 61-year-old woman who used generic bromfenac twice daily for 7 days. She began using the generic medication 3 days prior to cataract surgery and used it for 3 days postoperatively. BCVA = 20/40 -2.

Dr. Radcliffe: Branded medications are a priority for you. How do you communicate that idea to patients? Are they concerned about cost? Will they follow your recommendations to get the best outcomes?

Dr. Trattler: Cost is always an issue. Patients do have budgets, and not everyone can afford every medication. But when we specifically want a branded medication, I think we need to help patients understand the value of that medication.

Patients hear the pharmacist say, "You could save money if you switch to this generic version. It is exactly the same." In situations

where there really is no difference, patients should save money. But when the generic alternatives are inferior, my office staff and I educate patients about those important differences. Patients typically understand that it is worth paying a little bit extra for the branded drug. They are willing to pay more for something they feel has greater value, particularly when we explain that the choice will impact their postoperative outcomes.

Dr. Radcliffe: What role does a medication's formulation play in helping you deliver satisfying outcomes?

Dr. Trattler: I always prefer emulsions or gel medications over suspensions, because I do not want to worry about how well patients shake the bottle. If patients do not shake a suspension as directed, then they do not get a uniform dose.[1] Although a suspension such as prednisolone acetate is a gold-standard topical steroid and an excellent medication in general, I have to keep its uncertain uniformity in mind when I prescribe it. In contrast, difluprednate emulsion and loteprednol gel provide a uniform dose from the first drop to the end, with no loss of efficacy.[1,2]

Dr. Radcliffe: If a patient uses a generic medication, is it usually available in your preferred emulsion or gel formulation?

Dr. Trattler: There are no truly equivalent generic options for medications such as loteprednol gel (Lotemax; Bausch + Lomb) or difluprednate emulsion (Durezol; Alcon). Difluprednate has no generic version at all. Pharmacists in some cases will try to switch patients from loteprednol gel to generic loteprednol suspension. However, these are completely different medications. There are no appropriate generic options for either of these medications.

Dr. Radcliffe: Sometimes before and after surgery, we give patients a demanding dosing regimen. If your patients expect great vision and convenience, those demands might adversely affect their perception of the experience. Can you offer any strategies for how to strike a balance between efficacy and convenience? What dosing regimen do your patients follow?

Dr. Trattler: The dosing regimen is very important. When patients are prescribed several types of drops to be administered multiple times during the day, their compliance certainly can dwindle.

To avoid this problem, I generally prescribe the same three medications before and after surgery: a topical antibiotic, a topical steroid, and a topical NSAID. The drops are started 3 days prior to surgery. Pretreatment with an antibiotic helps reduce bacteria on the ocular surface, and preoperative topical NSAIDs and steroids reduce the risk of postoperative inflammation.

Dosing is key. Before surgery, I instruct patients to use the topical antibiotic (such as Besivance [besifloxacin ophthalmic suspension; Bausch + Lomb] or Vigamox [besifloxacin ophthalmic suspension; Alcon]) and steroid (Durezol or Lotemax gel) twice per day, which is more convenient and better for compliance than regimens that require four doses per day. Patients also start 3 days prior to surgery with a four-doses-per-day regimen of either Bromday (bromfenac; Bausch + Lomb) or Ilevro (nepafenac; Alcon). After surgery, I instruct my patients to use the same antibiotic twice per day for 10 days. For 1 month, they use the NSAID once per day and the steroid twice per day.

Dr. Radcliffe: By having patients use the same medications before and after surgery, you only have to ensure that they buy the branded medications once, and then you know that they will follow through with the right medications after surgery. Is there anything else you can do to ensure compliance?

Dr. Trattler: Absolutely. Although I think it is not as common seeing patients the day after surgery, I often see patients in my examination room the afternoon after surgery. They have surgery in the morning, and they might come to my office around 3 or 4 PM. I check to make sure there are no spikes in IOP, and it gives me another opportunity to discuss their medication regimen. I occasionally make an adjustment, but most often it is just a nice chance to talk and to reinforce compliance with our plan after surgery. ■

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1. Marlowe Z, Davio S. Dose uniformity of loteprednol etabonate ophthalmic gel (0.5%) compared with branded and generic prednisolone acetate ophthalmic suspension (1%). *Clin Ophthalmol.* 2014;8:23–29. (Accessed June 19, 2015: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3862701).
2. Stringer W, Bryant R. Dose uniformity of topical corticosteroid preparations: difluprednate ophthalmic emulsion 0.05% versus branded and generic prednisolone acetate ophthalmic suspension 1%. *Clin Ophthalmol.* 2010;4:1119–1124. (Accessed June 19, 2015: http://www.ncbi.nlm.nih.gov/pubmed/20957058).