Breaking the cycle: Treating dry eye with Cyclosporine A
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As eye care professionals, we have an obligation to treat our patients’ ailments and provide them with the best treatment options available. While over-the-counter artificial tears are typically our first line of attack, they are merely palliative at best, and they fail to treat the underlying cyclic inflammation responsible for most varieties of dry eye.\(^1\),\(^2\) This shortfall has led to the development of treatments like 0.05% cyclosporine A (CsA) and omega-3 fatty acids, which are thought to directly treat the underlying inflammation of dry eye. CsA is an immunomodulatory agent with anti-inflammatory properties that operates by preventing T cell activation and cytokine release.\(^3\) Similarly, omega-3 fatty acids are believed to act by competitively inhibiting the arachidonic acid pathway.\(^4\) While there are positive omega-3 fatty acids studies in the literature,\(^4\),\(^5\) there are as many or perhaps even more that present contradictory results.\(^6\) This is in stark contrast to CsA, which has consistently produced marked improvements in dry eye signs and symptoms.\(^1\),\(^7\)-\(^9\)

The following are additional reasons why CsA is a superior treatment to omega-3 fatty acids:
- CsA is applied directly to the affected area and is not systemically absorbed.\(^1\)
- CsA is effective at treating severe dry eye (Sjögren’s Syndrome).\(^1\)
- CsA is effective in treating dry eye induced by cataract and refractive surgery.\(^7\),\(^8\)
- CsA is the only FDA approved drug for treating dry eye.\(^3\)
- CsA is only available by prescription, which may allow for better doctor management.

CsA is a clinically proven, cost-effective means of treating dry eye, and it more consistently produces significant results than omega-3 fatty acids.\(^1\),\(^3\),\(^7\)-\(^9\) While CsA is not without side effects (e.g., burning), patients typically accept these minor inconveniences when properly educated because it is such an effective treatment for their chronic affliction.\(^1\),\(^10\)

References:
8. Lee HS, Jang JY, Lee SH, Im SK, Yoon KC. Clinical effectiveness of topical cyclosporine a 0.05% after laser epithelial keratomileusis. Cornea 2013;32:e150-5.

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