Randomized double-blind clinical trial of autologous serum versus artificial tears in dry eye syndrome

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Purpose: To determine symptoms improvement in dry eye patients with short-term autologous serum (AS) eyedrops treatment using the standardized Ocular Surface Disease Index (OSDI) survey. Materials and methods: A double-blind randomized crossover clinical trial was conducted, comparing short-term (2 weeks) topical treatment with AS eyedrops diluted at 20% versus conventional artificial tears treatment in adult severe dry eye syndrome (DES) patients. The main outcome measure was assessment of symptoms with OSDI survey. Secondary outcomes were corneal and conjunctival fluorescein staining score of OXFORD and tear break up time (TBUT). The protocol was registered in www.clinicaltrials.gov, ID number: NCT00779987. Results: Twelve severe DES patients were included. Autologous serum treatment showed a statistically significant (p = 0.002) higher OSDI decrease (50%) versus conventional treatment (22%). There were no significant changes in objectives parameters (OXFORD and TBUT). Conclusions: S