

October 2021

Academy Express ฉบับวันที่ 30 Oct 2021

Outcome of simple limbal epithelial transplantation for limbal stem cell deficiency verified

This study evaluated the efficacy and outcome of simple limbal epithelial transplantation (SLET) both autologous SLET (autoSLET) and living-related allogenic SLET (Lr-alloSLET) for limbal stem cell deficiency (LSCD) using epithelial phenotype detection (impression cytology with immunofluorescence staining: ICIF, *in vivo* confocal microscopy: IVCN, and immunohistochemistry analysis), integrated with clinical manifestation. The efficacy of SLET was excellent with an overall survival rate of 89.3% at 2 years and 75.6% at 3 years with no difference between autoSLET and Lr-alloSLET. Visual improvement was achieved in both SLET groups. Limbal explants can regenerate and restore the corneal surface while maintaining the characteristics of limbal stem cells as shown by epithelial phenotype detection and immunohistochemistry integrated with clinical evaluation. *Ocular Surface*, June 2021

<https://pubmed.ncbi.nlm.nih.gov/34214675/>

Academy Express ฉบับวันที่ 23 Oct 2021

Radiological characteristics of extraocular muscles in patients with MG with ocular manifestations

In this case-control study, researchers used magnetic resonance imaging or computed tomography scan to analyze radiological characteristics of the extraocular muscles (EOMs) in patients with myasthenia gravis (MG) with ocular manifestations, compared to a control group. Atrophic EOMs were frequently found in the MG group, particularly in chronic cases. The results highlight the importance of muscle involvement in MG and may be helpful for clinical decision-making, *Clinical Ophthalmology*, June 2021

<https://pubmed.ncbi.nlm.nih.gov/34103891/>

Academy Express ฉบับวันที่ 16 Oct 2021

Comparison of ocular complications and efficacy of PST vs. PTS botulinum toxin injection in BEB

This randomized controlled trial recruited 24 participants who visited a botulinum toxin clinic. Each participant received preseptal (PST) BONT injection in one eye and pretarsal (PTS) BoNT injection in the fellow eye to address benign essential blepharospasm (BEB). Symptoms were recorded and measured 1 and 3 months after injection. All participants were examined by a single investigator, who was masked to the injection allocation. There was a statistically significant higher rate of self-reported lagophthalmos in PTS (52.17%) than with PST (30.43%). Efficacy and other complication outcomes were not statistically significant between the injection techniques. *American Journal of Ophthalmology*, May 2021

<https://pubmed.ncbi.nlm.nih.gov/33965414/>

Academy Express ฉบับวันที่ 9 Oct 2021

The ocular microbiome is compromised in Stevens-Johnson syndrome

The ocular surface microbiome maintains ocular surface homeostasis, and since it is continuously exposed to the external environment, its microbiome, tears, and local Immunity are vital for maintaining normal conditions and preventing pathogen colonization, which commonly leads to opportunistic infection. Several approaches were applied to Identify the ocular microbiome, including conventional culture techniques and molecular sequencing techniques: Using 16s rRNA sequencing, alterations in the type, proportion, and composition of bacterial communities were observed in SJS patients compared to the healthy group; and conventional culture techniques indicated a higher number of positive bacterial cultures in the SJS group, SJS causes structural changes in the ocular surface and significantly affects Its microbiome. Treatment using prebiotics and probiotics to re-establish the normal ocular ecosystem and bring back a healthy ocular surface awaits confirmation. *Frontiers in Medicine (Lausanne)*, May 2021

<https://pubmed.ncbi.nlm.nih.gov/34026783/>

Meibomian glands dropout in patients with inactive thyroid related orbitopathy

This crass-sectional study evaluated the structure and function of meibomian glands in 106 eyes of 53 patients with thyroid related orbitopathy (TRO) compared with 106 eyes of 53 age- and sex-matched controls without TRO and demonstrated the significantly higher meibomian gland dropout in patients with inactive TRO. On the basis of these findings, we suggest that ophthalmologists should examine meibomian glands' structure, in addition to their function, for early detection, management, and prevention of further meibomian gland destruction in patients with inactive TRO. *PLOS ONE*, April 2021

<https://pubmed.ncbi.nlm.nih.gov/33886675/>