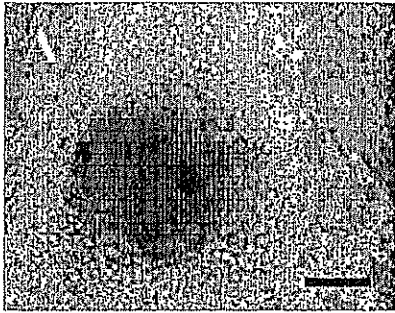
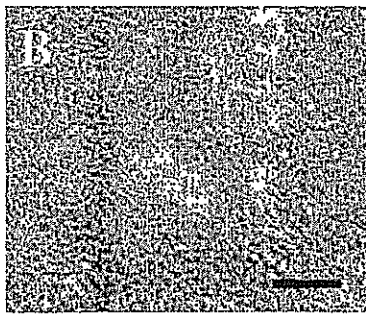


Figure 1: Characterization of conjunctival cell culture on HAM:

A: Three-day-old culture showing cells obtruding the tissue



B: 14 days old confluent culture on HAM



C: Immunofluorescence staining with cytokeratin AE-1 on the culture section

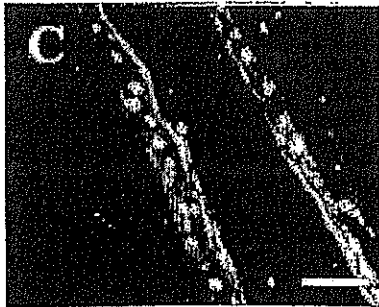
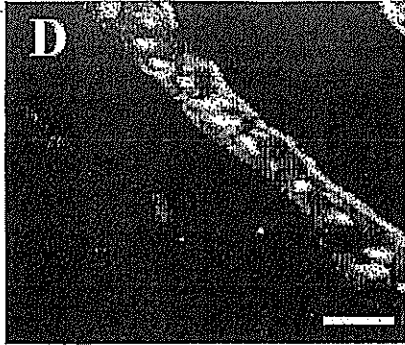


Figure 1: Characterization of conjunctival cell culture on HAM: (cont'd)

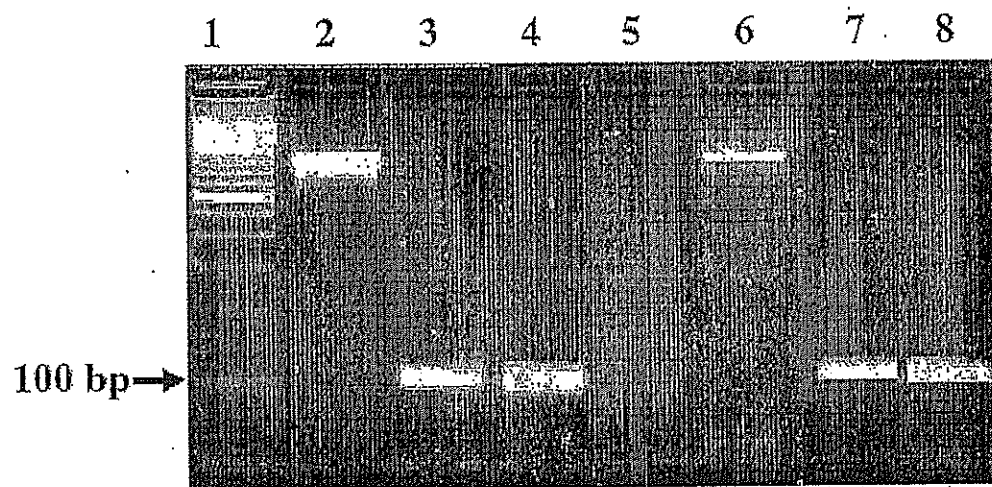
D: Immunofluorescence staining with cytokeratin AE-3 on the culture section



E: PAS staining of the whole mount of 20 days old culture PAS stain whole mount with magenta colored goblet cells.



Figure 2: Expression of MUC5AC and MUC4. RT-PCR analysis of conjunctival cultured cells and conjunctival biopsy with MUC5AC (103 bp)(lanes 3, 7), MUC4 (102 bp) (lanes 4, 8) markers respectively.



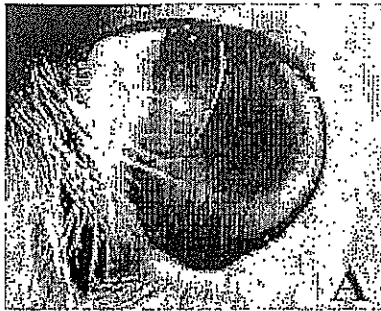
Lane 1 is 1 Kb DNA size marker,

lanes 2 and 6 are GAPDH (house keeping gene) of cultured conjunctival cells and conjunctival biopsy respectively.

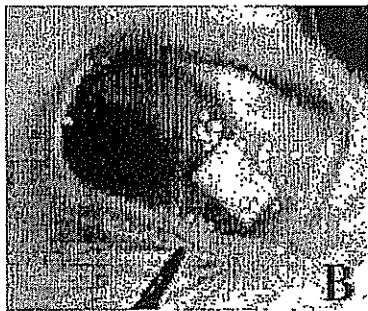
Lane 5 is negative control with no cDNA added to the reaction mixture.

Figure 3: Rabbit model of chemical injury creation and transplantation.

A: Rabbit's normal eye.



B: Saturated NaOH filter paper placed on the rabbit's conjunctiva

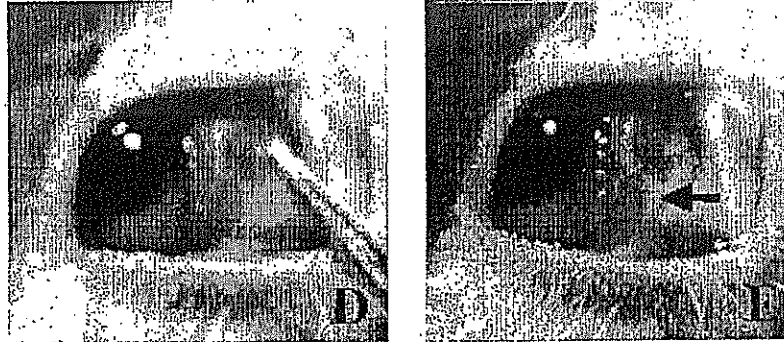


C: Injury site just before the transplantation.

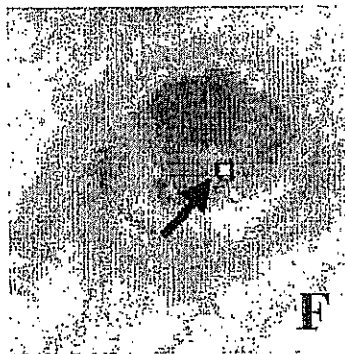


Figure 3: Rabbit model of chemical injury creation and transplantation. (cont'd)

D and E: Transplanted site



F: Healed injury



G: control eye with injury made and followed up, showing traces of injury.

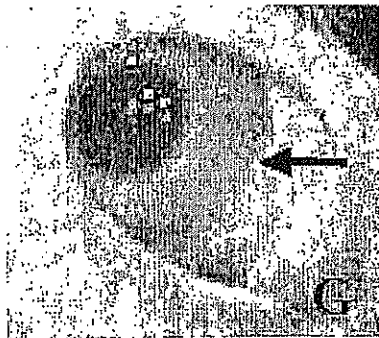
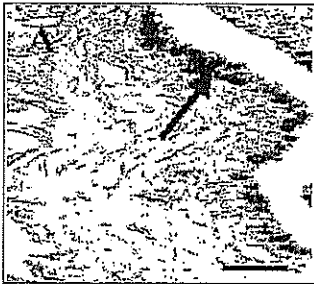
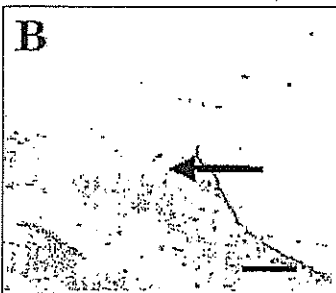


Figure 4: Evaluating the effect of transplantation on injury and detecting the retained and survived human cells *in vivo*. The illustration shows

A: Normal rabbit conjunctiva section stained with PAS (to detect goblet cells)



B: Injury site showing no goblet cells and epithelium sloughed off



C: Wound healing without epithelium in the eye with only HAM transplanted

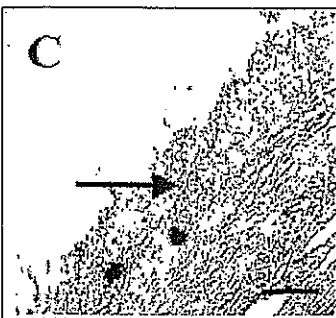


Figure 4: Evaluating the effect of transplantation on injury and detecting the retained and survived human cells *in vivo*. (cont'd)

D: Wound healing in the eye with only injury created and followed



E: H & E staining of the site of injury with transplanted cultured cells



F: PAS staining of the engrafted human and rabbit cells at the site of transplantation

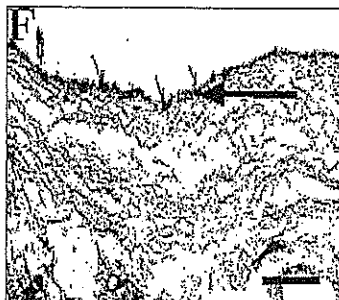
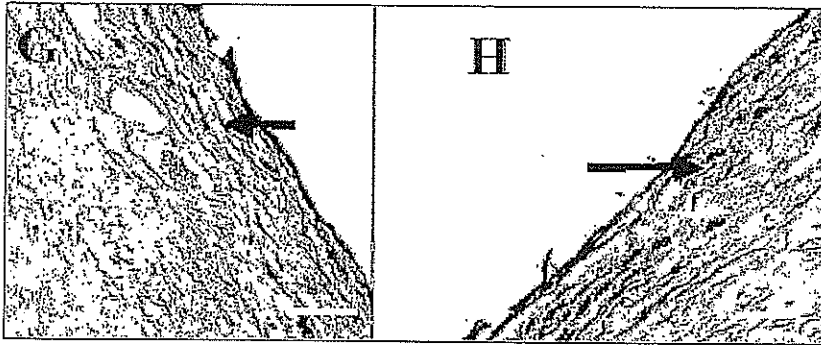


Figure 4: Evaluating the effect of transplantation on injury and detecting the retained and survived human cells *in vivo*. (cont'd)

G and H: Anti-human mitochondrial antibody positive brown colored human cells detected at the site of transplantation



I: Detected to be migrated at the subepithelial zone of rabbit's conjunctiva.

