

# Amniotic membrane transplant for corneal epidermolysis bullosa

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# Epidermolysis Bullosa

- Inherited epidermolysis bullosa (EB) is a group of genetically transmitted skin disorders characterized by blistering
- Incidence of 50 cases of the disease per 1,000,000
- Wide variety of symptoms
- Diagnosis skin biopsy, immunofluorescence, electron microscopy

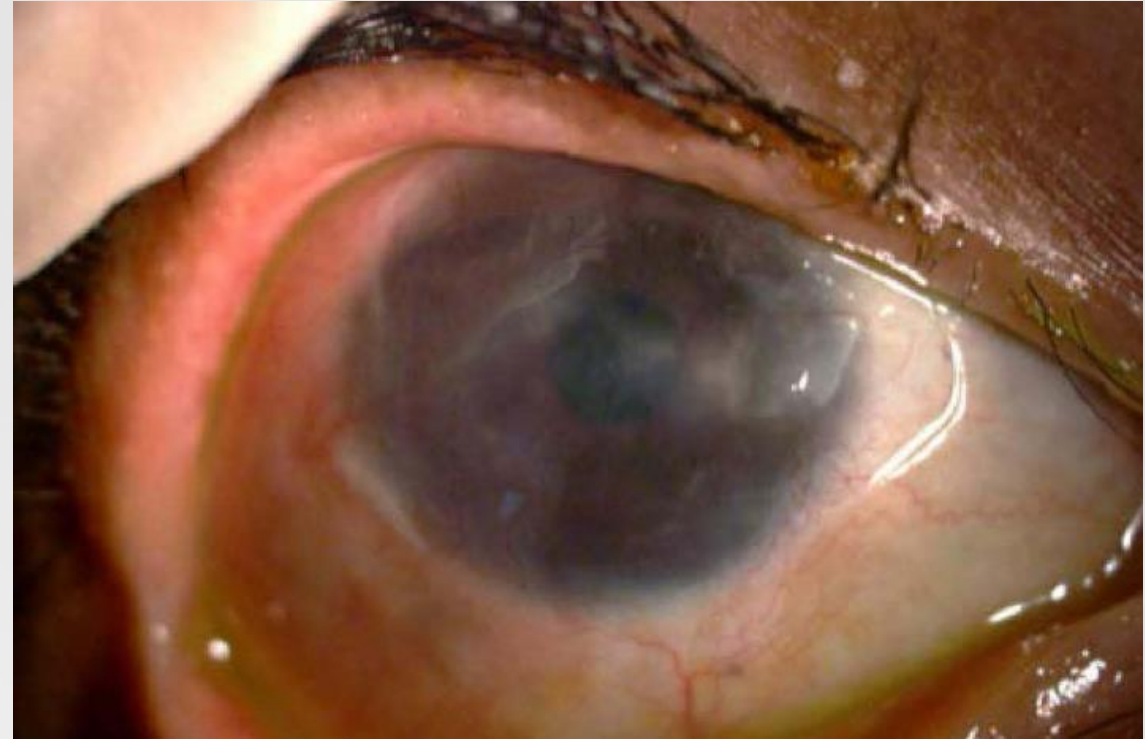


# Ocular manifestation of Epidermolysis Bullosa

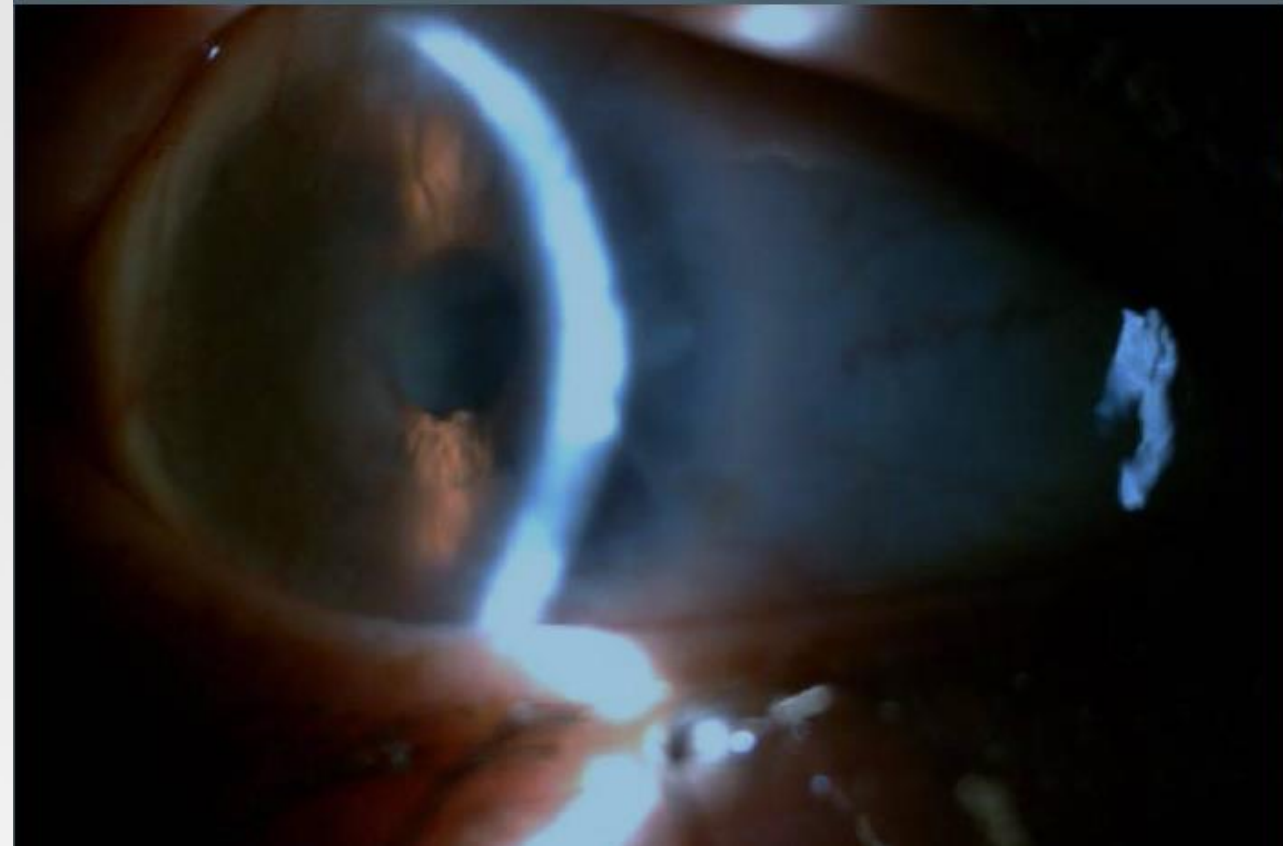
- 68% of EB have ocular involvement
- Those with ocular involvement 100% of them have corneal complications
- corneal complications include erosions, exposure keratitis, epithelial defects
- Other ocular surface involvement include blepharitis , symblepharons and ectropion.

# The case report

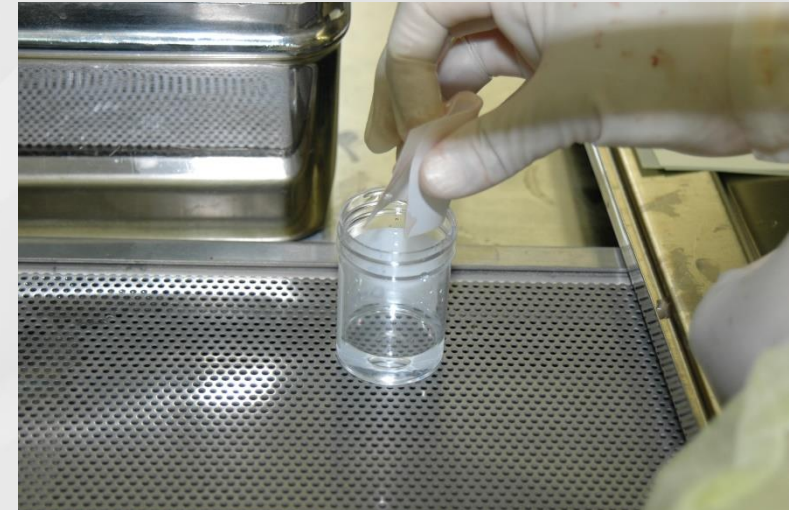
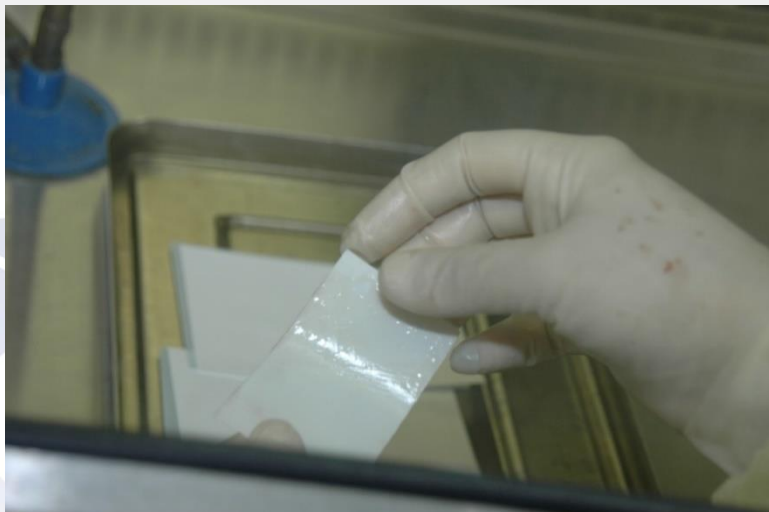
- 23-year-old Bahraini female. A known case of dystrophic recessive epidermolysis bullosa
- Corneal scarring and vascularization with limitation of ocular motility due to symblephara.
- Surgical Release of symblephara and superficial keratectomy.
- AMT was done with epithelial side up to cover the cornea, conjunctiva and the palpebral conjunctiva.



- Full ocular motility was achieved immediately in the post-operative period.
- At 3 months follow-up, she had complete epithelialization of the cornea and improvement in visual acuity from Hand Motion to 0.4
- At 4 years follow-up the visual acuity and the ocular surface were stable.



# The amniotic membranes preparation technique



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# The surgical technique of AMT in EB

- Under general anesthesia, removal of fibrovascular tissue was done along with hemostasis.
- The AM was used with epithelial side up and applied to cover the cornea, limbus, the conjunctiva, the fornices and the tarsal conjunctiva using 8/0 vicryl.
- Double armed sutures were used to secure the AM on the palpebral conjunctiva and were supported with bolster on the eyelid skin.
- Symblepharon ring was inserted.

# Conclusion

- Amniotic membrane transplant is effective in the management of Epidermolysis bullosa patients with corneal scarring and symblephera
- The technique of preparation and preserving the amniotic membranes used locally is safe and effective in managing ocular surface disorders.

