No sutures corneal grafting-A novel use of overlay sutures and fibrin

glue in Deep Anterior Lamellar Keratoplasty.

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Abstract:

Purpose: To describe a case where Deep Anterior Lamellar Keratoplasty (DLK) was performed

using overlay sutures and fibrin glue alone, without the need to directly suture the corneal button.

Methods: Deep Anterior Lamellar Keratoplasty was performed using a modified Melles technique on

a 21-year-old patient who had stromal scarring secondary to severe infective keratitis. Overlay

sutures and fibrin glue were used to secure the donor button and then a bandage contact lens was

inserted. No sutures were required to directly suture the donor button to host tissue. All securing

sutures were removed 4 weeks after the surgery. Six months post surgery, the graft was clear and

the patient rehabilitated by wearing acceptable astigmatic spectacle correction. Results: The

patients visual acuity in the affected eye was 6/12 wearing a spectacle prescription of -0.25/-3.25 x

160. Conclusion: The use of overlay sutures and fibrin glue in DLK is a time efficient and effective

technique. We propose that this technique may be used routinely in cases where donor corneal

button appears to fit well in the stromal bed at the time of surgery, that is, where there is no disparity

in the thickness of the donor button compared to the host bed. © 2007 British Contact Lens

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