



The University Of East Anglia

The evaluation of fibrin tissue adhesive for skin closure following eyelid surgery

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Abstract

The use of fibrin tissue adhesives in clinical practice has grown over the past 10 years, and there has been increased use of adhesives in different surgical subspecialties. Conventional suture closure of periorbital tissues is effective however may result in complications, which has led to the search for other techniques and innovations. Although tissue adhesives have been used in clinical practice there is a paucity of randomized controlled studies that have evaluated their advantages and disadvantage in surgical practice.

The goals of eyelid surgery include the restoration of tissue structure and function while causing minimal morbidity. The use of a medical product that induces physiological clotting and fibrin formation is appealing in both theory and clinical practice. However fibrin tissue adhesives present disadvantages and complications of their own. This thesis set out to evaluate the use of fibrin tissue adhesives in eyelid surgery and includes a 5-year randomized control study comparing fibrin tissue adhesives to suture closure of skin.

A challenge in the evaluation of eyelid surgery is the definition of a successful outcome. Surgical outcomes have traditionally been measured by surgical complications and the need for further redo surgery. Other relevant aspects of surgical outcome that have rarely been evaluated include surgical healing and scar formation, asymmetry that is present however not requiring further surgery, patient experience and satisfaction. This research set out to further define outcomes for eyelid surgery to enable a more comprehensive and objective evaluation of surgical outcome.

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Notations

ASGBI	Association of Surgeons of Great Britain and Ireland
BAAPS	British Association of Aesthetic Plastic Surgeons
BAPRAS	British Association of Plastic Reconstructive and Aesthetic Surgeons
BMA	British Medical Association
BOPSS	British Oculoplastic Surgery Society
CSF	Central Spinal Fluid
CT	Computerized Tomography
DOH	Department of Health
EBM	Evidence Based Medicine
FTA	Fibrin Tissue Adhesive
GMC	General Medical Council
HC	Healthcare Commission
LF	Levator Function
LREC	Local Research Ethics Committee
ML	Millilitre
MM	Millimetres
MPS	Medical Protection Society
MRD	Marginal Reflex Distance
MRI	Magnetic Resonance Imaging
MMCR	Müller's Muscle-Conjunctival Resection

NHS	National Health Service
NSAIDs	Non Steroidal Anti-Inflammatory Drugs
PA	Palpebral aperture
PROMS	Patient Reported Outcome Measures
RCT	Randomized Control Trial
RCOphth	Royal College of Ophthalmologists
SC	Skin Crease
WHO	World Health Organization

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