A NOVEL METHOD FOR EARLY DETECTION OF DEEP WOUND INFECTION/DEHISCENCE IN BLADDER EXSTROPHY: POSTOPERATIVE SERIAL NON-CONTACT INFRARED TEMPERATURE MEASUREMENT OF SURGICAL WOUND

Shabnam SABETKISH, Abdol-Mohammad KABAFZADEH, Nastaran SABETKISH, Sorena KEIHANI
Childrens Hospital Medical Center, Pediatric Urology Research Center, Section of Tissue Engineering and Stem Cell Therapy, Tehran University of Medical Center, Tehran, Iran

PURPOSE

Surgical wound infection is a major risk factor for bladder dehiscence (BD) after bladder exstrophy surgery. This study aims to introduce a practical method for early detection and management of surgical site infection and impending BD after exstrophy surgery.

MATERIAL AND METHODS

Eleven exstrophy patients who underwent single stage reconstruction were enrolled. A non-contact digital infrared temperature measurement device was used to measure temperatures on forehead and the surgical wound site prior, during and after reconstruction. Temperatures were documented every 8 hours for 12 days postoperatively. Parents were trained to measure the temperatures for two weeks following discharge. The same postoperative protocol was applied for 13 hypospadias patients (group II) as the control group.

RESULTS

None of the patients in the hypospadias group developed local temperature rise during the postoperative follow-up. However, none of the BD developed in the exstrophy group even when there was tida rise in forehead.