

¹Ramamurthi R, ²Goodrich A

¹Stanford University , Stanford , CA, United states; ²Texas Children's Hospital , Houston , Texas, United states

Epidermolysis Bullosa refers to a group of genetically inherited diseases with significant morbidity. The skin and mucous membranes can separate easily from the basal layers on exposure to minimal trauma. The bullous lesions of the skin at any age can pose a problem for monitoring. Adhesive tapes and EKG electrodes can worsen the skin lesions due to the shearing forces involved during placement and removal.

We report a case of 2-month-old baby with Simplex form of EB scheduled to have Nissen fundoplication as the baby was having frequent episodes of silent aspirations. We transferred the baby onto the OR table covered with sheets soaked with aquaphore ointment. We placed a well lubricated clip-on pulse oximeter probe on the ear lobule with good signal return. Noninvasive blood pressure cuff was placed on the right arm on top of a layer of soft cotton. We used a lubricated throat pack to tie the ETT in place. A non-adherent return pad was used for grounding the diathermy. At the end of the procedure, the child was left intubated and the care handed over to the NICU team.

Various techniques have been described for safe placement of EKG electrodes in bigger children. These include, but not limited to, using sections of defibrillator pads, sticking the leads onto the bandages and indirect monitoring(1,2,3). These options are not practical in small infants. The defibrillator pads are slippery and can move causing artifacts. Sticking onto bandages may not give a consistent signal as the bandages can themselves soak up the conducting gel. The indirect monitoring may not work for transport.

We describe a new method of EKG monitoring. The neonatal electrodes were placed on the chest over a layer of Vaseline gauze. Mepital silicone mesh-tape was used to stabilize the electrodes in-place to prevent them slipping away. This technique ensured un-interrupted EKG monitoring during the entire procedure, transport back to the NICU after the procedure and for post-op monitoring in the NICU. It is interesting to note that NICU had avoided EKG monitoring during the pre-op NICU stay for fear of causing skin damage.

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