

Pulse oximeter: too hot or too tight?

P Punj^{1,2}, L Quinn¹, A Jeeves¹, B Carney¹, M Lodge¹, A Sparnon¹

1 Department of Paediatric Burns Surgery, Women's and Children's Hospital, North Terrace, South Australia, 5006

2 Email address: puvesh@gmail.com

Pulse oximeters have been in use since the 1980's and consist of a light-emitting diode used to direct red and infrared light onto the skin with a photo-detector to measure the absorption of light by haemoglobin. The oximeter registers the oxygen saturation level of arterial blood relatively accurately and provides a non-invasive method of monitoring arterial oxygen saturation. There are reports in the literature on complications associated with its use secondary to equipment failure from overheating of the sensor, application factors resulting in pressure ischemia and location factors resulting in trauma during magnetic resonance imaging (MRI)^{1,2,3}. Health care personnel should be vigilant of the potential complications though rare, associated with the use of pulse oximeter. This is in view of the potential growing trend in the use of electrical devices in patient care. We present a case of a premature male neonate born at 26-weeks gestation, 160km from Adelaide with a partial thickness burn to dorsum of right foot, which was managed conservatively.

Key Words

Pulse oximeter, injury, burn

Nominated Stream for Oral Presentations

- Medical
- Nursing
- Allied Health
- Scientific

Nominated Stream for Poster Presentations

- Care
- Prevention
- Research

General instructions for preparing your abstract:

- Save this file to your desktop
- Please only capitalise the first word and pronouns in your abstract title
- Make sure you include all the authors and their organisation details in the abstract
- Highlight the presenting author by make his/her name bold
- Your abstract will appear on the web site and in the program book exactly as submitted