Japan Council for Quality Health Care

Project to Collect Medical Near-Miss/ Adverse Event Information

Medical Safety Information

No.70, September 2012

Burns Caused by the Tip of a Light Source Cable during Surgery

Five cases have been reported involving cases in which, when using a light source device or operating light during surgery, burns resulted from having placed the tip of a light source cable on the surgical drape over the patient while the power supply was still on (information collection period: from January 1, 2008 to July 31, 2012; the information is partly included in “Individual Theme Review” (p.129) in the 25th Quarterly Report).

Cases of burns resulting from having placed the tip of a light source cable on the surgical drape over the patient during surgery while the power supply was still on have been reported.

Type of Light Source Device or Operating Light	Surgical Procedure	Site of Burn
Light source for laparoscope	Appendectomy	Thigh
Retractor with attached light source	Surgical correction of microtia	Abdomen
	Femoral osteotomy	Inner thigh
Surgical endoscope light source	Transurethral ureterolithotripsy	Pubic region
Optical fiber operating light	Low anterior resection	Near the ilium

◆ The term "surgical drape" refers to the cloth or non-woven textile used to cover the patient during surgery.

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Case 1

The patient was placed in the right lateral decubitus position and left femoral osteotomy commenced. A retractor with attached light source was used to illuminate the operative field. After using the retractor, the connection between the light source and the retractor was removed and the light source cable was placed on the surgical drape. A short while afterwards, it was noticed that the power supply to the light source had not been switched off, so it was switched off. When the surgical drape was removed after finishing the surgery, a burn measuring approximately 1.5cm had formed on the inner part of the patient's right medial thigh.

Case 2

During transurethral ureterolithotripsy surgery, when the light source cable was temporarily removed, it was placed on the surgical drape while the power supply to the light source cable was still on. After finishing the surgery, the nurse discovered a burn measuring approximately 2.5×2cm on the patient's left pubic region and also found that there were marks on the surgical drape that had been used, suggestive of a high-temperature burn.

Preventive measures taken at the medical institutions in which the events occurred.

- **Pay attention to the intensity of the light at the tip of the light source cable when light source apparatus, etc. is not in use.**
- **Do not place light source cables in the vicinity of the operative field.**

Complementary comment by the Comprehensive Evaluation Panel

- **The tip of a light source cable, which emits a powerful light, becomes hot, so if it is placed on a combustible material, there is a risk that the material will combust or cause burns. Switch such cables off when not in use.**

* As part of the Project to Collect Medical Near-Miss/Adverse Event Information (a Ministry of Health, Labour and Welfare grant project), this medical safety information was prepared based on the cases collected in the Project as well as on opinions of the "Comprehensive Evaluation Panel" to prevent the occurrence and recurrence of medical adverse events. See quarterly reports and annual reports posted on the Japan Council for Quality Health Care website for details of the Project.
http://www.med-safe.jp/

* Accuracy of information was ensured at the time of preparation but cannot be guaranteed in the future.

* This information is intended neither to limit the discretion of healthcare providers nor to impose certain obligations or responsibilities on them.

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