

Medical Safety Information

Pharmaceuticals and Medical Devices Agency

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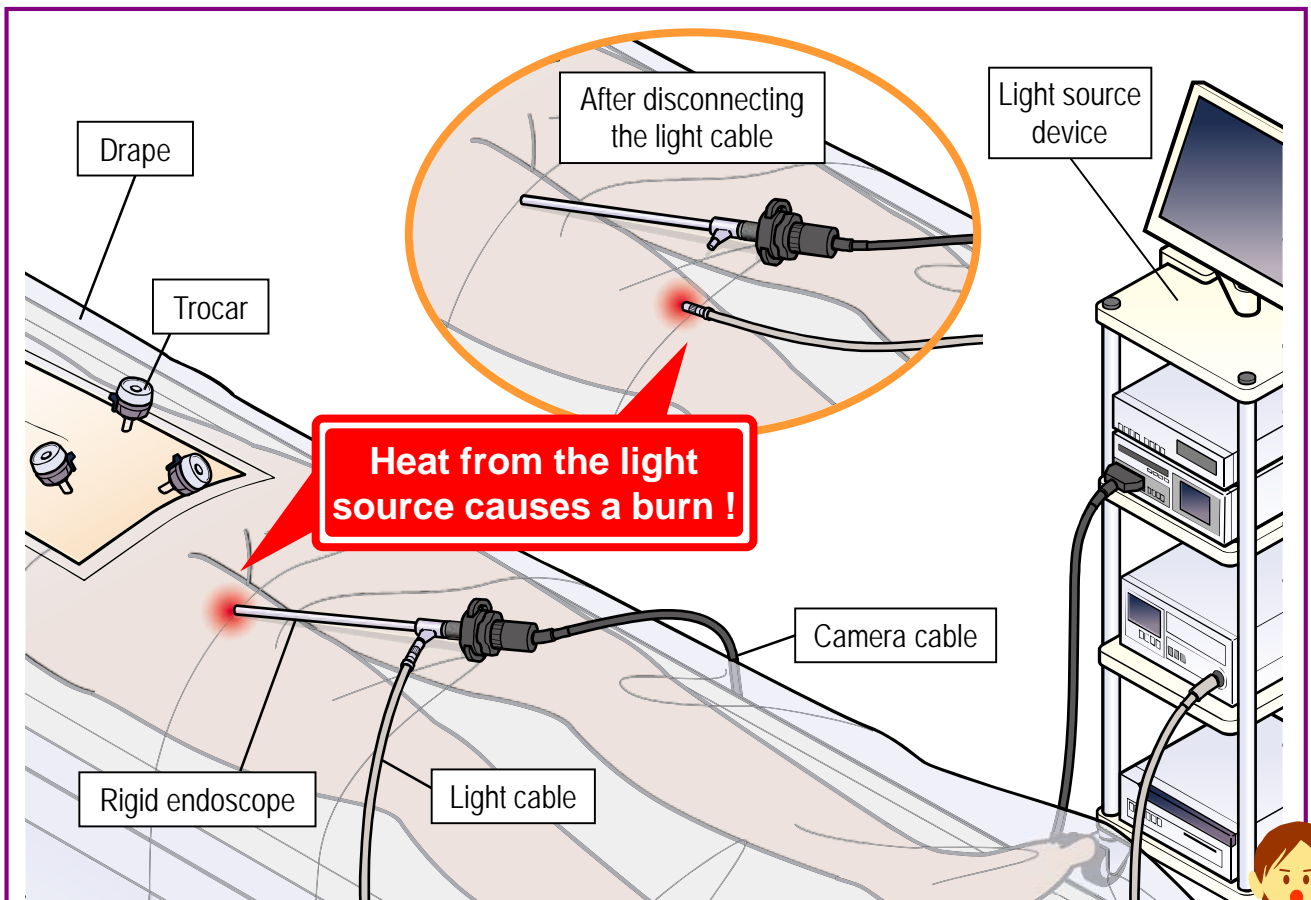
Accidental Burns during Surgery using a Light Source, an Electric or Laser Scalpel

POINT Key points for safe use

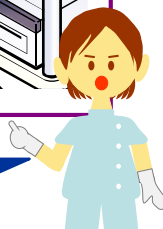
(Case 1) A lighted rigid endoscope burned the drape when placed on it during the laparoscopic surgery and left a burn on the patient's thigh under the drape as well.

1 Precautions when handling a light source device

- When using a light source with an endoscope or a retractor, etc., do not place the tip of the light source directly on a drape.



After the light source has been turned off, the tip of the endoscope or the disconnected light cable remains hot for a certain time!



- (Case 2) An electric scalpel burned the drape when placed on it during surgery and left a burn on the patient's thigh under the drape as well.
- (Case 3) A laser scalpel ignited the drape when placed on it during surgery and left a burn on the patient's thigh under the drape as well.

2 Precautions when handling an electric or laser scalpel

- Do not place the tip of the electric or laser scalpel directly on a drape.

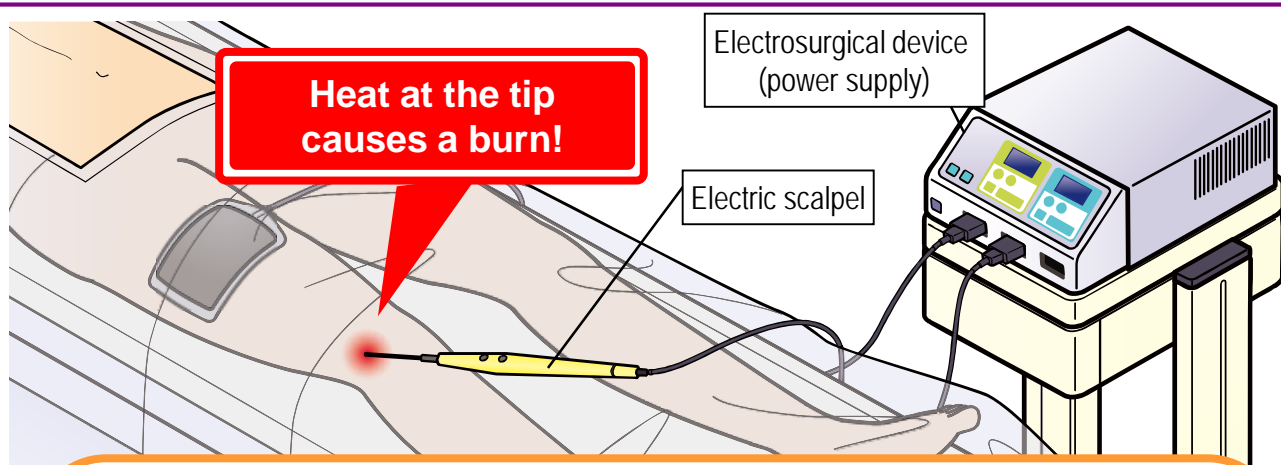
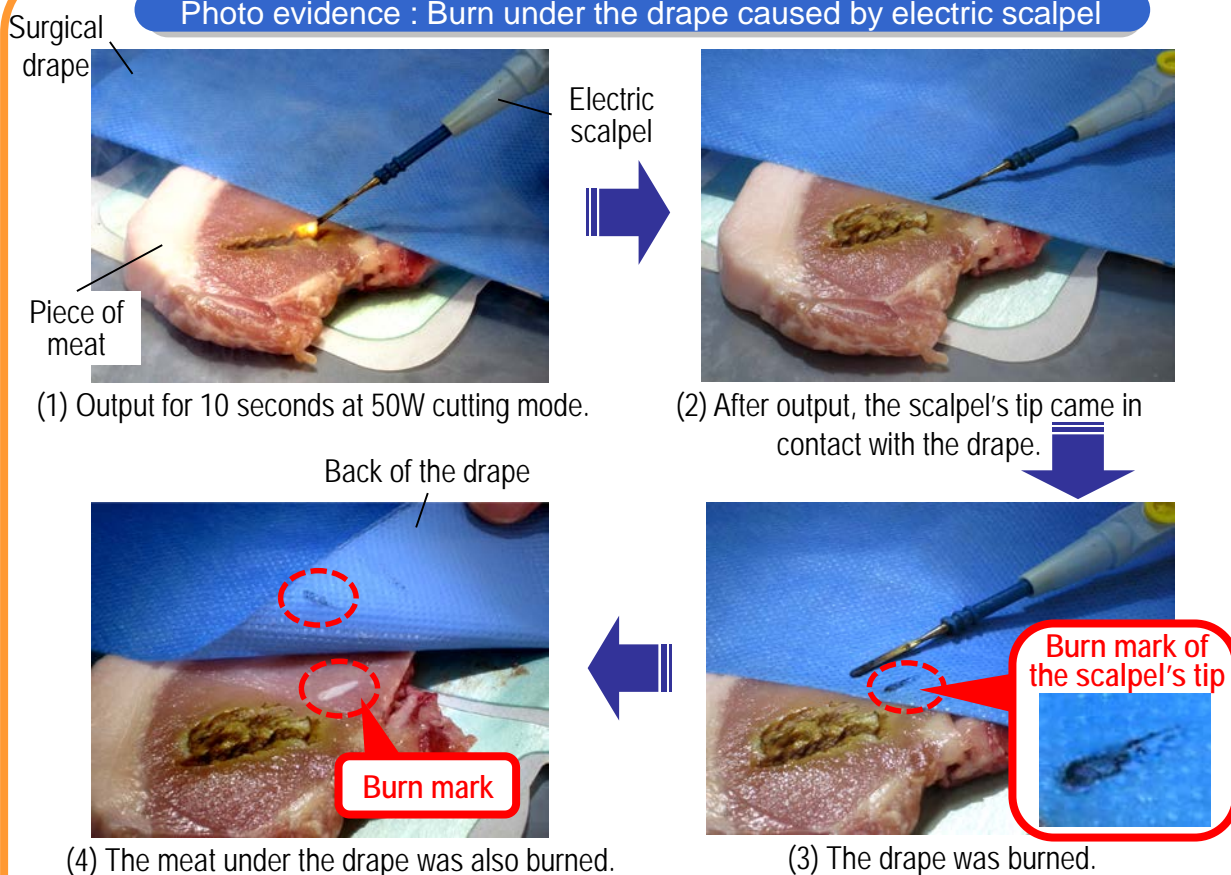


Photo evidence : Burn under the drape caused by electric scalpel



Note) The test shown above is only an example. The degree of burn may differ depending on the mode and time of output, and the shape of the scalpel's tip.

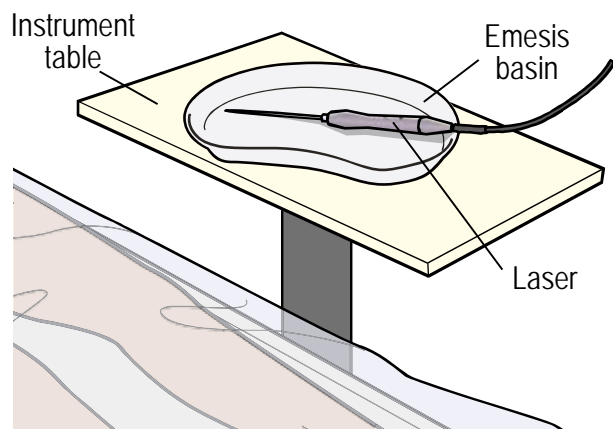
Photos by Surgical Knife Committee, Japan Association of Medical Devices Industries

The tip of electric scalpel is extremely hot (approx. 300°C) during use and remains hot (100°C or higher) for a certain time after being turned off!



An example of management of electric or laser scalpel, etc. in surgery

Place on an instrument table



Place in a holster

Electric scalpel

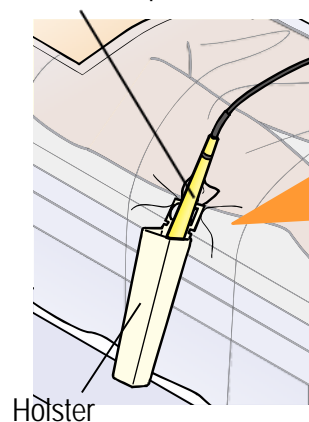


Photo by
Covidien Japan Inc.

Use a silicon mat

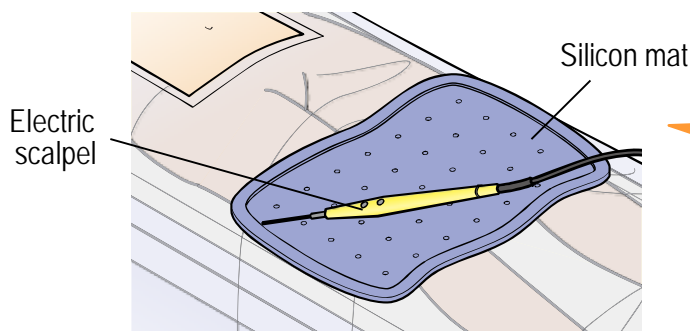
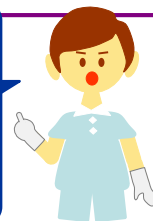


Photo by
Amco Inc.

In principle, an electric or laser scalpel etc. after use should not be placed on a drape. However, a holster or a silicone mat, as shown above, may be used depending on the circumstances during surgery. Pay attention to the position of surgeon and arrangement of instruments. Quickly remove the electric or laser scalpel, etc. if found placed in contact with the patient.



About this information

- * PMDA Medical Safety Information is issued by the Pharmaceuticals and Medical Devices Agency for the purpose of providing healthcare providers with clearer information from the perspective of promoting the safe use of pharmaceuticals and medical devices. The information presented here has been compiled, with the assistance of expert advice, from cases collected as Medical Accident Information Reports by the Japan Council for Quality Health Care, and collected as Adverse Drug Reaction and Malfunction Reports in accordance with the Pharmaceutical Affairs Law.
- * We have tried to ensure the accuracy of this information at the time of its compilation but do not guarantee its accuracy in the future.
- * This information is not intended to impose constraints on the discretion of healthcare professionals or to impose obligations and responsibility on them, but is provided as a support to promote the safe use of pharmaceuticals and medical devices by healthcare professionals.