A rare skin burn during endoscopic submucosal dissection

A 54-year-old woman was diagnosed with early gastric cancer (EGC) in the gastric antrum during screening examination (▶Fig. 1a). The EGC was successfully removed using an insulated-tip knife (Endocut I, Effect 3, Duration 2, Interval 4; ERBE Elektromedizin, Tübingen, Germany) (▶Fig. 2). Unfortunately, we noticed after the procedure that the skin on the patient’s back, where the electrode pad had been placed, was severely burnt (▶Fig. 3, ▶Video 1). The patient recovered in a week after applying recombinant human epidermal growth factor gel to the burn.

Endoscopic submucosal dissection (ESD) is extensively used to treat lesions of the gastrointestinal tract, with bleeding and perforation being the most common complications [1]. However, rare cases of skin burn have also been recorded. Miyaga et al. reported that five patients experienced precordial skin burns after ESD when removing lesions from the upper or middle portion of a reconstructed gastric tube through the presternal route, owing to the gastric tube being positioned too close to the precordial skin [2]. However, no case of skin burn from the electrode pad has been reported. To the best of our knowledge, this was the first case of skin burn out of 1560 ESD-treated gastric lesions over 12 years in our clinical center. A possible explanation could be a wet electrode pad during ESD as a result of humid weather and a broken air conditioning unit. We would therefore like to remind endoscopists of the possibility of skin burns from the electrode pad and the need to keep the electrode pad dry to prevent such complication.

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References