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Intraperitoneal Explosion Resulting from the Use of Electrocautery

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Explosion of the gastrointestinal tract during use of the electrocautery have been reported previously. Most reports deal with explosions of the lower large bowel. A careful search of the literature has revealed no previous reference to explosions of the intraperitoneum during a celiotomy of which the patient had a pneumoperitoneum resulting from a perforation of the gastrointestinal tract. We report a case of an intraperitoneal explosion resulting from the use of electrocautery in an 83 year-old female. The patient visited our hospital complaining abdominal pain that had been sustained during 10 months and was aggravated one day before admission. The plain X-ray showed a massive pneumoperitoneum. The patient underwent an emergency laparotomy and was used to open the abdominal wall by electrocautery. A loud explosion followed as soon as the peritoneum was opened by the electrocautery. No change in the patient's vital sign was noted and all the abdominal viscera were intact. The operative finding showed gastric outlet obstruction due to an antral mass, gastric laceration on the body and an enlargement of multiple lymph nodes. The pathological evaluation diagnosed it as a gastric adenocarcinoma. We report this rare case with a review of the relevant literature. (J Korean Surg Soc 2002;63:342-344)

Key Words: Explosion, Electrocautery, Celiotomy

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83 10 . 30

. 120/80 mmHg, 108 , 36°C .

. フト 10.6 g/dl, フト 9,100/mm³ 314.6 mg/dl, 317 IU/L, 1,533 IU/L フト (Fig. 1) 2

가 (Fig. 2).

. (linear alba)
2 forcep

15 20 cm 1 フト

342

가

: 343



Fig. 1. Plain x-ray at admission shows marked dilation of stomach.

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31 .

William T. Bovie7 ↑ 7 ↑ (11, 12)

1928 Harvey Cushing
.(11, 12)

· (11,12)

,

Fig. 2. Plain x-ray at 2 hours after admission shows peumoperitoneum.

가 N₂O .(1-3)

.(4, 7-10) 가 가 .(8) 가 가 가 (H_2) (CH_4) 가 4.1 74% (13) 5.3 14% 가 .(14) 가 가

가

,(6)

가 가

가

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