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Titel des Beitrags: A new instrument for endoscopic submucosal dissection (with videos).

Abstract: Although it is effective for treatment of early neoplasms, endoscopic submucosal dissection (ESD) can be technically demanding and time consuming. Furthermore, use of multiple instruments is often mandatory for performing various steps associated with the procedure. To design, create, and evaluate a new instrument for ESD. Feasibility study by using an acute porcine model. Center for preclinical research, university hospital. This study involved 6 female pigs. Gastric ESDs including circumferential incision and coagulation of bleeding vessels were performed by using a single device. Incision was done with the prototype instrument in a closed position by using cutting current. Submucosal dissection was performed by using an approach with 4 steps: (1) open forceps, (2) grasp submucosal fibers, (3) elevate and retract tip to avoid contact with muscle layer, (4) dissect fibers by using cutting current. Bleeding was terminated with the same instrument by grasping vessels and applying coagulation current. Overall feasibility and performance, time needed to achieve complete resection. The new instrument was useful for performing all single steps needed. Mean (± standard deviation [SD]) time needed for the whole procedure was 48.5 ± 9.9 minutes. Mean (± SD) time needed for incision and dissection was 37.8 ± 8.8 minutes. Animal study, limited number. The new instrument has potential advantages in...
comparison with standard instruments used for ESD. Incision, dissection, and coagulation of vessels can be performed with a single instrument, and the technique of lifting submucosal fibers during dissection potentially decreases the risk of perforation. Comparison studies with larger gastric lesions treated with standard ESD techniques are needed.