



PP202

## Clinical control study of disposable electronic gastroscope for endoscopic gastrectomy of gastric polyps

**博士。 Rui Zhu<sup>1</sup>**, Dr. Qiu Zhao<sup>1</sup>

<sup>1</sup>Zhongnan Hospital Of Wuhan University, Wuhan, China

### Background and Purpose

Gastric polyp is a kind of swelling lesion originated from gastric mucosa or submucosa and has the tendency of canceration. In order to solve the hidden danger of cross infection in patients, HuiZhou Xzing Technology Co., Ltd. developed a disposable electronic gastroenteroscopy. This study was to evaluate the safety and efficacy of disposable electronic gastroscopy (Xzing-W200B) for endoscopic gastrectomy of gastric polyps.

### Methods

This study adopted a randomized, open control design. After signing the informed consent, subjects were selected according to the admission criteria and randomly assigned to the experimental group and the control group by coin flipping. All patients were treated with gastric polypectomy. The experimental group was treated with disposable electronic gastroscopy, and the control group was treated with Olympus GIF-HQ290. The performance and safety of disposable gastroscopy for endoscopic polypectomy were comprehensively evaluated according to the therapeutic effect, incidence of intraoperative bleeding, incidence of perforation, evaluation of clinical experience, device-related adverse events. Twenty patients were recruited for this clinical trial.

### Results

The complete resection rate of gastric polyp under endoscopic treatment was 100% in both groups. No bleeding or perforation occurred in the two groups. Evaluation of clinical operation performance between experimental group and control group: flexibility and therapeutic operation were ( $3.50\pm1.08$  vs.  $5.80\pm0.42$ ) and ( $4.50\pm1.08$  vs.  $5.70\pm0.67$ ), with statistically significant differences ( $t=6.273, 2.979, P=0.00, 0.008$ ). The assistive function ratio was ( $5.00\pm1.05$  vs.  $5.60\pm0.97$ ), the comparison of image conditions and brightness, contrast and sharpness was ( $3.40\pm0.84$  vs.  $4.00\pm0.00$ ) and ( $3.40\pm0.97$  vs.  $4.00\pm0.00$ ), the difference was not statistically significant ( $P>0.05$ ). There were no adverse events in both groups.

### Conclusion

Disposable electronic gastroscope is safe and feasible for endoscopic treatment of gastric polyps. Although its operation performance is slightly inferior to that of traditional Olympus endoscope, its image acquisition quality is good and the effect is comparable to that of Olympus GIF-HQ290 gastroscope.