**Scientific research process**

1. What did this study explore?

This study explored whether the diagnostic classification method of endoscopic ultrasound (EUS) which we created could differentiate Crohn’s disease (CD), primary intestinal lymphoma (PIL), intestinal tuberculosis (ITB) and other colorectal ulcerative diseases.

(2) How did the authors perform all experiments?

This was a retrospective study. We searched the inpatient medical record database for confirmed cases of CD, PIL and ITB from 2008 to 2015 at our center, collected data on EUS from randomly-chosen patients who formed the training set. All cases found to have colorectal ulcers using EUS were obtained from the endoscopy database and formed the test set. We then removed the cases which were easily diagnosed, and the remaining cases formed the perplexing test set.

(3) How did the authors process all experimental data?

We conducted univariate logistic regression analysis on the training set to summarize EUS features of CD, PIL and ITB, and created a diagnostic classification method, re-diagnosed the cases in training set, test set and perplexing set using the classification method, determined EUS diagnostic accuracies.

(4) How did the authors deal with the pre-study hypothesis?

We analyzed the origin of the problems which were reflected from the diagnostic accuracy, adjusted the classification then repeated the re-diagnosing and accuracy-calculating steps, got a result which was closer to the facts.

(5) What are the novel findings of this study?

The EUS features of CD, PIL and ITB are different. The diagnostic classification method, as a new statistical method, is reliable in the differential diagnosis of colorectal ulcerative diseases.