Methods We randomised consecutive patients diagnosed with ASUC (modified Truelove and Witt’s classification) to receive placebo infusions or combination antibiotics (intravenous ceftriaxone and metronidazole) groups. Response as defined by oxford criteria was used to assess response on day three. We also assessed changes in partial Mayo score, CRP levels and reduction in fecal calprotectin at day three. Also, we assessed the need for second line drug therapy, colectomy, length of hospital stay and mortality by day 28.

Results Fifty patients were randomised: 25 in each arm (Median age: 33, IQR 25–45, 23(46%) males). Twenty-two patients had extensive disease, while the median disease duration was 24 months. Sixteen patients (64%) in antibiotic arm responded (complete and partial response) at day three while 18 (72%) in the placebo arm responded. Three patients from the antibiotic group underwent colectomy. Three patients in the antibiotic arm received intravenous cyclosporine, whereas four patients in the placebo group received cyclosporine (p=0.725). There was no significant difference in change in CRP, Partial Mayo and fecal calprotectin between the two groups on day three.

Conclusions Combination of intravenous ceftriaxone and metronidazole in patients with ASUC neither improved the day 3 response nor reduced the need for second line therapy.

Conclusions The results suggest a lack of benefit of intravenous antibiotics in the setting of acute severe UC. The use of oral antibiotics for induction of maintenance needs further evaluation.

Background Predicting aggressive Crohn’s disease (CD) is crucial for determining therapeutic strategies. We aimed to develop a prognostic model to predict disease-related complications leading to early-onset surgery within 1 year after diagnosis of CD and to create a nomogram to facilitate clinical decision-making.

Methods This retrospective study was conducted from January 1, 2012, to December 31, 2016, in a single tertiary referral center, using data from patients newly diagnosed with CD and showing B1 behavior according to Montreal classification. The model was established using multivariable logistic regression analysis with evaluation of the receiver operating characteristic (ROC) curves and areas under the curve (AUC). The model was calibrated and assessed for discrimination. Further, a user-friendly nomogram was created.
Results

The mean follow-up period was 53.45±12.81 months. Of 614 eligible patients, 13.5% developed surgery-related complications, including stenosis, perforation, and severe gastrointestinal bleeding. We identified age (Odds ratio (OR) 0.914, P=0.004), disease duration (OR 2.675, P<0.001), perianal disease (OR 16.013, P<0.001), previous surgery (OR 3.652, P=0.003), and extraintestinal manifestations (OR 7.625, P=0.001) as significant independent factors associated with early-onset complications and developed a prognostic model (figure 1A), A Prognostic model predicting complications leading to surgery within 1 year after diagnosis, whose predictive ability was appraised with AUC of 0.965, specificity of 96.71%, and sensitivity of 67.24%. This model was validated with good discrimination (AUC of 0.933), and excellent calibration was demonstrated using the Hosmer-Lemeshow goodness-of-fit test (figure 1B), Hosmer-Lemeshow goodness-of-fit test demonstrating a good fit of this model. A nomogram was created to facilitate clinical bedside practice (figure 1C) A nomogram predicting complications leading to surgery within 1 year after diagnosis in Crohn’s disease patients.

Conclusions

This validated prognostic model can effectively predict early-onset complications leading to surgery and screen aggressive CD, enabling physicians to customize therapeutic strategies and monitor the intensive disease.