Conclusion: Chromoendoscopy using indigocarmine dye is a valuable technique in demonstrating dysplastic and inflammatory recto sigmoid lesions and could be used as a routine technique for the diagnosis of rectosigmoid disorders especially in the developing countries.

Introduction: Chromoendoscopy is a technique that uses stains during endoscopy to highlight differences in mucosa, as well as dysplastic and malignant changes that are not apparent by conventional endoscopy. We aim to evaluate the role of chromoendoscopy using indigo carmine dye in early detection of rectosigmoid lesions in a group of Egyptian patients with various gastrointestinal presentations.

Method: Eighty five patients were presenting to Endoscopy Unit, Internal Medicine Department; Sohag University for colonoscopy examination with different Indications for colonoscopy. History taking, complete physical examination, laboratory and radiological examination. Conventional colonoscopy was performed and immediately before ending the conventional colonoscopy examination, re-introduction of the endoscope up to 30 cm from the anal verge was done. Staining was applied to normally appearing mucosa of the sigmoid colon and rectum with 0.4% Indigocarmine solution. After staining newly detectable suspicious areas were assessed and biopsied.

Result: A total number of 85 patients The diagnosis after conventional colonoscopy was normal in 43 patients (50.6%) , 17 patients (20%) had hyperplastic polyps, 7 patients (8.2%) had carcinomas, 7 patients (8.2%) had non-specific colitis,4 patients (4.7%) had angiodysplasia ,4 patients (4.7%) had diverticulae ,2 patients (2.4%) had adenomatous polyps and 1 patient (1.2) had a benign rectal ulcer. After chromoendoscopy , histopathological examination showed that 20 lesions (15.3%) have normal histopathological examination . Inflammatory conditions were detected in 52 (39.7%) lesions, hyperplasia in 32 (24.4%) while 23 lesions (17.5%) show dysplastic features.

Conclusion: Chromoendoscopy using indigocarmine dye is a valuable technique in demonstrating dysplastic and inflammatory recto sigmoid lesions and could be used as a routine technique for the diagnosis of rectosigmoid disorders especially in the developing countries.