Background To assess the validity of the pit patterns Kudo classification and the NBI international colorectal endoscopic (NICE) classification on detection of the depth infiltration of colorectal laterally spreading tumours (LST).

Methods Colorectal laterally spreading tumours were collected from digestive endoscopy centre of PLA army general hospital from Mar. 2010 to May 2016. There were 250 LSTs were mucosal stained, grouped according to pit patterns Kudo classification; 208 LSTs were observed by NBI, grouped according to NICE classification. Then compared the pit patterns classification and NICE classification with pathologic diagnosis, separately.

Results The pit pattern of the most LST was type IIIL (30.56%) and IV (32.94%). V pit pattern which signifies the cancerated metaplasia has large proportion in granular-nodular mixed (LST-GM) and non-granular-flat-elevated (LST-NGF), 29.11% and 41.93% respectively. In the LST – GM, V1 accounted for 24.05%, and In LST – NGPD V_N accounted for 19.35%, higher than other subtypes. The accuracy of type V for predicting submucosal invasion is 100%, the accuracy of type V_N for predicting colorectal early cancer is 100%, for predicting submucosal invasion is 58.33%. There were 101 LSTs with low-grade dysplasia; all the lesions were NICE2 type, 59 LSTs with high-grade dysplasia, 93.22% (55/59) for NICE2 type, 6.78% (4/59) for NICE3 type. A total of 13 cases were submucosal carcinoma (SM-d), 61.54% (8/13) for NICE2 type, 38.46% (5/13) for NICE3 type.

Abstract IDDF2018-ABS-0158 Table 1 Pit patterns and clinicopathological characteristics of LST

	Pit Patterns							n
	I	II	III _L	III _S	IV	V _I	V _N	
Pathological type								
Inflammatory polyp	6 (75.00)	2 (6.25)	4 (5.19)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	12
Serrated lesions*	2 (25.00)	26 (81.25)	6 (7.79)	0 (0.00)	2 (2.41)	0 (0.00)	0 (0.00)	36
LGIN								
Tubular adenoma	0 (0.00)	3 (9.38)	57 (74.03)	1 (20.00)	9 (10.84)	2 (6.06)	0 (0.00)	72
Villous adenoma	0 (0.00)	1 (3.13)	6 (7.79)	0 (0.00)	53 (63.86)	5 (15.15)	0 (0.00)	65
HGIN	0 (0.00)	0 (0.00)	4 (5.19)	4 (80.00)	19 (22.89)	20 (60.61)	5 (41.67)	52
SMC	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (18.18)	7 (58.33)	13
Total	8	32	77	5	83	33	12	250

*Serrated lesions: a group of lesions characterised by serrated epithelium, including hyperplastic polyp(HP), traditional serrated adenoma(TSA) and sessile serrated adenoma/polyps (SSA/Ps). LGIN, low grade intraepithelial neoplasia; HGIN, high grade intraepithelial neoplasia; SMC, submucosal carcinoma.

Conclusions In terms of LSTs, the type IIIL is the predominant pit pattern in LST-NG, whereas the type IV pit pattern occurs in the LST-G, the pit pattern V and NICE3 indicate the large possibility of submucosal invasion, should be noticed by endoscopic physicians.

IDDF2018-ABS-0159

ENDOSCOPIC CHARACTERISTICS OF COLORECTAL LATERALLY SPREADING TUMOURS

Xin Fan*. PLA Army General Hospital, China

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Background To analyse the endoscopic characteristics and therapeutic methods of colorectal laterally spreading tumours.

Methods Colorectal laterally spreading tumours were collected from digestive endoscopy centre of PLA army general hospital from Mar 2010 to May 2016. Their relationship between morphology? predilection site and histopathology were analysed retrospectively.

Results A total of 615 colorectal laterally spreading tumours (551patients) were collected. The average diameter of lesion was 22.2±14.7 mm, the size was from 10 to 20 mm in the most (66.5%), and LSTs were predominant in the proximal colon (55.4%). Granular-homogenous(LST-GH) was detected more frequently in the ileocecal region and ascending colon (75/140,53.7%); Granular-nodular mixed (LST-GM) was detected more frequently in the rectum and sigmoid colon (91/140,65.0%); Non-granular-flat-elevated (LST-NGF) and non-granular-pseudo-depressed (LST-NG-PD) were preferentially located in the proximal colon, especially more common in transverse colon, account for 25.9% and 32.1% respectively. Among lesions intramucosal carcinoma and submucosal carcinoma was 19.67% (121/615), submucosal carcinoma was 3.25% (20/615). LST-GM and LST-NGPD had a higher incidence of intramucosal carcinoma and submucosal carcinoma compared to the other subtypes, 43.28% and 34.52%, respectively. LST-NGPD was highest rates of submucosal invasion: 14.29%? LST-GM was predominant in the rectum; the mean tumour size was larger in the rectum than the colon (31.49±23.09 vs 20.82±9.86,p<0.05), higher incidence of high-grade dysplasia and submucosal carcinoma (36.43% vs 14.95%, p<0.001).

Abstract IDDF2018-ABS-0159 Table 1 Clinicopathological characteristics of the lesions

	Colon, n=475	Rectum, n=140	p value	All, n=615
Age, medium (range)	61 (17–92)	64 (31–88)	<0.05	62 (17–92)
Male gender	281 (59.16)	78 (55.71)	0.47	359 (58.37)
Subtypes of LST			<0.05	
LST-GH	109 (22.95)	31 (22.14)		140 (22.76)
LST-GM	78 (16.42)	62 (44.29)		140 (22.76)
LST-NGF	216 (45.47)	35 (25.00)		251 (40.81)
LST-NGD	72 (15.16)	12 (8.57)		84 (13.66)
Size, mean±SD(mm)	20.82±9.86	31.49±23.09	<0.05	23.25 ±14.69
Histological classification			<0.0001	
Low-grade dysplasia	275 (57.68)	74 (53.57)		349 (56.75)
High-grade dysplasia	58 (12.21)	44 (31.43)		102 (16.59)
Submucosal cancer	13 (2.74)	7 (5.00)		20 (3.25)

Conclusions LSTs were predominant in the proximal colon, but a greater proportion of LST-GM, greater mean-size, and greater presence of submucosal cancer found in rectal LST. LST-GM and LST-NGPD had a higher incidence of intramucosal carcinoma and submucosal carcinoma, in particular, LST-NGPD was highest rates of submucosal invasion, should be noticed by endoscopic physicians.

IDDF2018-ABS-0160 ENDOSCOPIC CHARACTERISTICS, TREATMENT AND FOLLOW-UP OF COLORECTAL LATEROALLY SPREADING TUMOURS

Zilin Kan*, Peng Jin. PLA Army General Hospital, China

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Background To analyse the endoscopic characteristics and therapeutic methods of colorectal laterally spreading tumours.

Methods Colorectal laterally spreading tumours were collected from digestive endoscopy centre of PLA army general hospital from Mar 2010 to May 2016. Their relationship between morphology, predilection site, pit patterns and histopathology were analysed retrospectively. And compared the follow-up results of different endoscopic treatment.

Abstract IDDF2018-ABS-0160 Table 1 Comparison of LST-G and LST-NG

	N	LST-G (%)	LST-NG (%)	x ² value	P value
Total		280	335		
Locations				59.99	<0.001
Rectum	139	93 (33.21)	47 (14.02)		
Ileocecal junction	76	51 (18.21)	25 (7.46)		
Colon	399	136 (48.57)	263 (78.51)		
Pit patterns				65.68	<0.001
Type I	8	1 (0.75)	7 (6.03)		
Type II	32	3 (2.24)	29 (25.00)		
Type III _s	5	0 (0.00)	5 (4.31)		
Type III _l	77	37 (27.61)	40 (34.48)		
Type IV	82	65 (48.51)	17 (14.66)		
Type V _I	34	23 (17.16)	11 (9.48)		
Type V _N	12	5 (3.73)	7 (6.03)		
Pathological types				110.454	<0.001
Serrated lesions*	78	26 (5.71)	118 (18.51)		
LGIN					
Tubular adenoma	223	86 (30.71)	137 (40.90)		
Villous adenoma	126	90 (32.14)	36 (10.75)		
HGIN	102	72 (25.71)	30 (8.96)		
SMC	20	6 (2.14)	14 (4.18)		

*Serrated lesions: a group of lesions characterised by serrated epithelium, including hyperplastic polyp (HP), traditional serrated adenoma (TSA) and sessile serrated adenoma/polyps (SSA/Ps). LGIN, low grade intraepithelial neoplasia; HGIN, high grade intraepithelial neoplasia; SMC, submucosal carcinoma.

Results A total of 615 colorectal laterally spreading tumours (551 patients) were collected. Granular (LST-G) was detected more frequently in the ileocecal region and rectum (75/140, 53.7%);

Non-granular (LST-NG) were preferentially located in the rest part of the colon. Pit patterns type IV has large proportion in the LST-G and type III_l in the type LST-NG. On histopathology, LST – NG in the majority with tubular adenoma (40.9%), while the LST – G than LST – NG more villiform than LST – NG (32.14% vs 10.75%). LST-G and LST-NG had a higher incidence of intramucosal carcinoma and submucosal carcinoma, 27.86% (78/280) and 13.13% (44/250), respectively. LST-NG was highest rates of submucosal invasion: 4.18%. To follow-up after treatment 330 cases of patients, 285 cases of lost to follow-up. Follow-up time span of 1~76 months, the median for 15 months. A total of 10 cases of recurrence, endoscopic piecemeal mucosal resection (EMPR) higher recurrence rate was 13.79% (4/29), compared to nearly 3 years after the ESD treatment, there is no recurrence of LST.

Conclusions Had a higher incidence of intramucosal carcinoma and submucosal carcinoma, in particular, LST-NGPD was highest rates of submucosal invasion, should be noticed by endoscopic physicians. The endoscopic submucosal dissection (ESD) is safe and effective treatment.

IDDF2018-ABS-0164 THE TEMPORAL RELATIONSHIP OF DAILY LIFE STRESS, EMOTIONS AND BOWEL SYMPTOMS IN IRRITABLE BOWEL SYNDROME: A SMARTPHONE-BASED EXPERIENCE SAMPLING STUDY

¹Yawen Chan*, ¹Suzanne Ho-wai So, ²Arthur Dun Ping Mak, ²Kewin Tien Ho Siah, ¹Wai Chan, ³Justin Che-yuen Wu. ¹Department of Psychology, The Chinese University of Hong Kong, Hong Kong; ²Department of Psychiatry, The Chinese University of Hong Kong, Hong Kong; ³Department of Medicine and Therapeutics, The Chinese University of Hong Kong, Hong Kong

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Background The current study aimed to model the moment-to-moment relationship between daily life stress, negative emotions and bowel symptoms among patients with irritable bowel syndrome – diarrhoea subtype (IBS-D) in the flow of daily life using a smartphone-based experience-sampling method (ESM).

Methods Patients with IBS-D (n=27) and healthy controls (HC) (n=30) completed ESM ratings of their real-time daily life stress, which was defined as the subjective stress related to daily activities, negative emotion and bowel symptoms 8 times a day for 14 consecutive days, following a baseline interview measuring bowel and mood symptoms. Moment-to-moment association between ESM variables was tested within and between groups using multilevel regression modelling.

Results Patients with IBS-D reported more severe bowel symptoms ($p < 0.01$) than HCs, but levels of daily life stress and negative affect were comparable between groups ($p > 0.05$). Time-lagged analysis of ESM data revealed that, among patients with IBS-D, daily life stress predicted a decrease in abdominal pain and urgency to defecation at a subsequent time point ($p < 0.05$), whereas severity of bowel symptoms and occurrence of diarrhoea predicted a subsequent increase in negative affect and daily life stress ($p < 0.05$). The above associations were not found among HCs (figure 1).

Conclusions ESM unveiled the dynamic relationship between bowel symptoms, stress and emotionality. Patients with IBS-D responded to bowel symptoms with more stress and distress momentarily. Counter-intuitively, daily life activity stress served as a protective factor for bowel symptoms. Our data informed the psychological understanding of IBS.