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CLINICAL, HISTOLOGICAL CHARACTERISTICS AND BRAF MUTATION IN PATIENTS WITH COLORECTAL POLYP IN THAI NGUYEN

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Background BRAF is a localised gene in chromosome 7q34. The BRAF V600E gene mutation as a necessary starting condition for the transition from benign to malignant lesions is well worth monitoring for prognosis of colorectal lesions.

Aims Describe histopathology and BRAF mutations in colorectal polyps.

Methods A total of 81 patients with non-cancerous colon polyps were randomly assigned to the study. Patients with endoscopic polyps, specimens for histopathology then classify groups: neoplastic, hyperplastic, hamartomatous, inflammatory polyp. The immunohistochemical analysis of these samples then determined the BRAF mutation.

Results The percentage of male is 69.1%, female is 30.9%. The mean age was 52.06 ± 12.83 . Adenoma polyps accounted for 63%. Serrated polyps were 35.8. Juvenile polyps had a ratio of 1.2%. Mild dysplasia is 58%, moderate dysplasia is 6.2%, severe dysplasia is 3.7%. BRAF gene mutation accounted for 22.2%, pervasive sample was highest with 19.8%, surface and bottom samples were 1.2%. BRAF gene mutations were detected in 12.5% hyperplastic polyp, 33.3% sessile serrated polyps, 100% traditional serrated adenomas, $p=0.01$. A total of 73/81 specimens were found to be inflammatory in which the BRAF mutation level + was detected in 86.7% of samples with inflammation, the level of ++BRAF gene mutation detected in 33.3% of samples have inflammation, $p=0.003$.

Conclusions BRAF gene mutations in serrated polyps were higher in hyperplastic polyps. This explains the notion that progression from hyperplastic polyps to serrated adenomas with BRAF mutations can lead to colorectal cancer.

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SAFETY AND DEFECATION STIMULATION BY ROYAL THAI ABDOMINAL MASSAGE

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Background Evidence to support the efficacy of Royal Thai Abdominal Massage (RTAM) on stimulating defecation has been lacking. This study aims to investigate the safety and defecation stimulation effect of RTAM.

Methods One hundred patients, aged at least 32 years, with constipation symptom, underwent 105 min RTAM by a professional masseuse from March 1 to September 30, 2017. Defecation behaviour diary was given and filled by the subjects. Data were analysed by using descriptive statistics. Thai Clinical Trials Registry No. TCTR20170817004.

Results Of 100 subjects, 51% could defecate within 24 hours after the RTAM session, of which 15 could defecate within an hour after treatment. The other 49% could finally defecate

in less than 72 hours after the RTAM session. No subjects experienced adverse event or injury.

Conclusions Royal Thai Abdominal Massage is safe and can effectively stimulate defecation in constipated patients. Further studies should be conducted to compare with medical treatment.

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THE SOCIAL EPIDEMIOLOGICAL FACTORS LINKED WITH INTESTINAL PROTOZOA INFECTION IN DEPOK, EAST JAVA, INDONESIA

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Background Intestinal protozoa infection consists of infection from *Giardia lamblia* and *Blastocystis hominis*. The occurrence is linked with poor personal hygiene, poor sanitation facilities and low education level. Previous studies have reported inconsistent results regarding the prevalence of intestinal protozoa infection. However, the prevalence of intestinal protozoa infection in the urban area of Indonesia has yet to be performed. Therefore, the aim of this study was to determine the prevalence of intestinal protozoa infections in urban region of Indonesia and the contributing sociodemographic factors.

Methods A cross-sectional study was performed among 278 healthy inhabitants in Depok from January to March 2012. Screening for protozoa infection was done through stool sample analysis, in which positive results are indicated by finding cysts or trophozoites.

Results Among the 278 subjects, the overall prevalence of protozoa infections was 12.59%, 88.57% of which was due to *Blastocystis hominis*. The sociodemographic factor that is significantly associated with the occurrence of intestinal protozoa infection was low BMI level. The normal BMI and obese BMI subjects were at a 0.417 and 0.174 risk of presenting with protozoa infection, respectively, compared to low BMI. The underlying mechanisms include increased bowel permeability and impairment of bowel barrier function, lower IgA antibody level, and villous atrophy.

Conclusions Low BMI level was correlated with increased prevalence of protozoa infection in urban region of Indonesia, Depok.

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COMPARISON OF TWO METHODS FOR ENDOSCOPIC FULL-THICKNESS RESECTION OF GASTROINTESTINAL LESIONS USING OVER-THE-SCOPE CLIP SYSTEM

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Background The over-the-scope clip (OTSC) system was developed not only for the closure of gastrointestinal defects but can also be used to assist endoscopic resection. The aim of this study was to compare and analyse the feasibility and safety of two methods of EFTR for the management of

challenging epithelial and subepithelial neoplasms that are not amenable to conventional resection techniques.

Methods This was a retrospective case series study of patients underwent two methods of endoscopic full-thickness resection (EFTR), either of which was deep resection using ESD knives and post-resection closure with OTSC (Group 1), the other was pre-resection closure with OTSC and second EFTR with snare (Group 2).

Results Of all 21 patients, 11 cases were in Group 1 and 10 in Group 2. The mean time of EFTR procedure was 76.83 ± 34.97 min in Group 1 which was significantly longer than that of Group 2 ($p=0.0128$). The mean time of OTSC closure and length of hospital stay of Group 1 were also longer compared to Group 2, but the difference was not significant. Both of complete resection (R0) and technical success rate of Group 1 were 83.3% and were both 100% for Group 2.

Conclusions EFTR for pre-resection closure is potentially faster compared with the concept of applying closure after EFTR. Larger prospective controlled studies comparing those two techniques are warranted in the future.

IDDF2018-ABS-0102 RELATIONSHIP BETWEEN HISTOLOGICAL CHARACTERISTICS AND BRAF MUTATION, P53, KI67 IMMUNOEXPRESSION IN PATIENTS WITH COLORECTAL POLYP IN THAI NGUYEN

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Background Changes in immune expression of BRAF, P53, and Ki67 proteins are part of the colorectal carcinogenic mechanisms associated with colorectal polyps.

Aims To analyse the relationship between histological characteristics and BRAF mutation, P53, Ki67 immunoexpression in patients with a colorectal polyp.

Methods A total of 81 non-cancerous colorectal polyp patients were randomised to the study. Patients undergoing endoscopic, histopathological and immunohistochemical analyses.

Results BRAF mutation in the dysplasia area showed an average of 1 ± 0.69 , non-dysplasia 0.33 ± 0.49 , $p=0.001$; P53 expression in dysplasia was found to be 1.74 ± 1.38 , non-dysplasia 1.22 ± 1.05 , $p=0.001$. Ki67 expression in dysplasia was found to be 1.33 ± 1.18 , non-dysplasia 1.20 ± 0.97 , $p=0.002$. The BRAF mutation in dysplasia area detected 50% of the traditional serrated polyps. BRAF mutation in dysplasia had 25% level ++, in pervasive samples, $p<0.001$. P53 expression in dysplasia was 68.6% level +++ in adenoma polyps group, in non-dysplasia area rate 33.3% level +++ in non-neoplastic polyp, $p<0.001$. P53 expression were mainly found in the bottom samples, the dysplasia area was 44.3% level +++, non-dysplasia 15.7% level +++, $p=0.02$. Ki67 expression in dysplasia area was 35.3% in the level of +++ adenoma polyps, non-dysplasia at 20% level +++ non neoplastic polyps, $p<0.001$. Ki67 expression of dysplasia 28.6% level +++ was mainly found in the bottom samples, $p<0.001$.

Conclusions BRAF mutation is more common in serrated polyps, P53, Ki67 expression are more common in adenomatous polyps. Immunohistochemical changes of these proteins are more common in the dysplasia area and there are differences between cell layers.

IDDF2018-ABS-0103 RELATIONSHIP BETWEEN ENDOSCOPIC CHARACTERISTICS AND BRAF MUTATION, P53, KI67 IMMUNOEXPRESSION IN PATIENTS WITH COLORECTAL POLYP IN THAI NGUYEN

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Background Co-results of endoscopy and BRAF mutation, P53, Ki67 immunoexpression increase sensitivity and specificity in the early diagnosis of colorectal cancer.

Aims To analyse the relationship between endoscopic characteristics and BRAF mutation, P53, Ki67 immunoexpression in patients with a colorectal polyp.

Methods A total of 81 non-cancerous colorectal polyp patients were randomised to the study. Patients undergoing endoscopic, histopathological, and immunohistochemical analyses.

Results Gender ratio: male 69.1%, female 30.9%. Highest age group 41–60 was 58%. There are a total of 175 polyps, an average number per patient 2.16 ± 1.14 . The proportion of multiple polyp patients was 61.7%, single polyp 38.3%. Sessile polyp was highest: 38.3%. The size of polyps <1 cm was the highest rate, with 46.9%, >2 cm with only 7.4%. Colon polyps accounted for 67.9%, rectal 32.1%. BRAF mutation in single polyp accounted for 22.8%, multiple polyps 22%. BRAF mutation in flat-elevated polyp were lowest with 20%, pedunculated polyps had the highest rate of 26.9%. Mutation of BRAF polyp size >2 cm accounted for 50% as the highest. P53 expression was similar in the single and multiple polyp. P53 expression level +++ in pedunculated polyp with 57.7%, subpedunculated 57.1%, sessile 32.3%. In terms of size, 100% polyps >2 cm express P53, $p=0.03$. Ki67 expression was similar in the single and multiple polyp. Polyp size >2 cm accounted for the highest Ki67 expression rate of 66.6%. Pedunculated polyp had the highest rate of Ki67 expression in the dysplasia of level +++ with 42.3%, subpedunculated and sessile polyp 16.1%, $p=0.04$.

Conclusions P53 immunoexpression are usually manifested in large pedunculated and subpedunculated polyps. Ki67 immunoexpression in the dysplasia area, manifested in pedunculated and subpedunculated polyps.

IDDF2018-ABS-0115 THE ASSOCIATION BETWEEN ELECTRONIC CIGARETTE SMOKING AND GASTROESOPHAGEAL REFLUX DISEASE IN ADULT URBAN POPULATION

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Background This study was aimed to investigate the association between electronic cigarette (e-cig) smoking and gastroesophageal reflux disease (GERD) among the adult urban population.

Methods A cross-sectional study was conducted among 267 adult people in Cirebon City, West Java, Indonesia. A self-administered questionnaire based on earlier validated GERD