

PCCRC detection were compared to those at the last examination.

【Results】 Patients with PCCRC had a higher rate of colon surgery history than those with NDC ($p < 0.001$), but the invasion depth was shallower ($p < 0.001$). T1b groups had more number of NPG-type than those of PG-type ($p = 0.018$). The ADR of colonoscopists at the time of PCCRC detection was higher than that of colonoscopists who performed the last examination ($p = 0.034$). The WT-NC was longer for PCCRC detection than at the last examination ($p = 0.010$).

【Conclusions】 Given that PCCRC cases were post-colon surgery cases, had long WT-NC, and were detected by colonoscopists with high ADR, most cases showed lesions that were missed during the previous colonoscopy. We believe that increasing the quality of medical care and QI will reduce the number of missed lesions and lead to the prevention of PCCRC onset.

P1-08

Usefulness of JNET classification with dual-focus magnification for diagnosis of colorectal tumors

(社会人大学院博士課程 1 年消化器内科学)

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【Background】 Narrow-band imaging (NBI) magnifying endoscopy has been reported to be useful for qualitative and quantitative diagnosis of colorectal lesions. Recently, Japan NBI Expert Team (JNET) classification was advocated which is the first universal narrow-band imaging magnifying endoscopic classification of colorectal tumors. However, magnifying endoscopy requires high experience and skill. On the other hand dual-focus NBI with electronic zoom (DF-NBI) can easily provide almost the same image of optical zoom magnifying images only by button

push.

The aim of study is to clarify the usefulness of JNET classification with DF-NBI for colorectal tumors.

【Methods】 We analyzed consecutive 476 colorectal lesions, which were diagnosed by JNET classification with DF-NBI observation before endoscopic treatment or surgery between April 2017 and July 2018. The instrument used in this study was a dual focus endoscope (CF-HQ290L/I; Olympus Medical Systems). The resected lesions were pathologically diagnosed in accordance with the criteria of the World Health Organization. Using these cases, we examined the relationship between each type of the JNET classification with DF-NBI and histopathologic findings. We calculated sensitivity, specificity, positive and negative predictive value (PPV and NPV), and accuracy for each category of the classification.

The JNET classification; the colorectal NBI magnifying classification consists of 4 types that are classified based on vessel pattern and surface pattern. The characteristics of Type 1 are invisible vessel pattern and having regular dark or white spots as surface pattern. The characteristics of Type 2A are regular vessel pattern, such as regular caliber or distribution, and regular surface pattern. The characteristics of Type 2B are irregular vessel pattern, such as variable caliber, irregular distribution, and irregular or obscure surface pattern. The characteristics of Type 3 are loose vessel areas or interruption of thick vessels and amorphous surface pattern. Indicators of types; Type 1 as hyperplastic polyp (HP) or sessile serrated polyp (SSP), Type 2A as low-grade dysplasia (LGD), Type 2B as high-grade dysplasia (HGD) or superficial submucosal invasive cancer (SM-s), and Type 3 as deep submucosal invasive cancer (SM-d).

【Results】 I. Final diagnosis: 66 Type 1 (43 HPs, 15 SSPs and 8 LGD), 389 Type 2A (16 HPs, 1 SSP, 385 LGD, 4 HGD and 1 SM-d), 16 Type 2B (3 LGD, 11 HGD and 2 SM-s), and 5 Type 3 (1 SM-s and 4 SM-d).

II. Diagnostic ability: The respective sensitivities, specificities, PPV, NPV, and accuracies were as follows: Type 1, 77.3%, 98.0%, 87.9%, 95.9%, and 94.7%; Type 2A, 97.2%, 95.0%, 99.0%, 87.4%, and 96.8%; Type 2B, 72.2%, 99.3%, 81.3%, 98.9%, and 98.3%; and Type

3, 80.0%, 99.8%, 80.0%, 99.8%, and 99.6%.

【Conclusions】 Our results suggest that JNET classification with DF-NBI is not only convenient but also has sufficient diagnostic ability. Further investigation comparing DF-NBI and conventional magnifying NBI is needed in the near future.

P1-09

術中レーザーマーキング実用化の検討

(呼吸器外科・甲状腺外科)

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平成 29 年度東京医科大学研究助成金による研究
末梢肺に発生する小型肺癌は手術中に触知することが困難で病変の同定に難渋する。そのため経気管支的に病変部へ細径レーザープローブを誘導し低出力レーザー照射を行い、そのレーザー光を肺表面から確認することで病変部を同定する方法を考案した。この術中マーキング法の実用性について安全性と有用性を検討した。

平成 28 年度にはハイブリッド犬を用いて動物実験を行った。経気管支的にレーザープローブを胸膜直下まで誘導し低出力レーザー照射を行ったところ、胸膜から 2 cm の深さまでレーザー光を確認することができた。

平成 29 年度にはヒトの摘出肺を用いて同様の実験を行った。右上葉肺癌患者の摘出肺を用いて、気管支断端よりシリンドリカル細径レーザープローブを胸膜直下へ誘導し、出力 70 mW の低出力レーザー照射を行った。胸膜直下では肺表面からレーザー光を明瞭に観察することができた。その後徐々にレーザープローブを抜いたところ、1 cm の深さまでレーザー光を確認することができた。その後病理学的にレーザー照射部の観察を行い、肺実質に損傷を認めないことを確認した。

動物実験に比べヒトの肺では確認できる深さが 1 cm と浅かったが、この原因として、動物実験では生体肺を用いたため拡張した肺に対してレーザー照射を行ったのに対し、ヒトでの実験では侵襲を最小限に抑えるために摘出肺を用いたため、肺が十分に拡張しておらず、肺組織の密度が高まったことが考

えられた。また患者は喫煙歴：40 本/day、20 年間の ex-smoker であり、肺表面に炭分沈着や胸膜の肥厚も認められたことも原因の一つとして考えられた。そのため術中に生体肺で喫煙歴がないまたは浅い患者であれば、胸膜からより深い部位の病変を確認することも可能であると推察された。

以上より低出力レーザーを用いて末梢肺の小型病変の部位を術中に同定することは、安全に可能であると考えられた。

P1-10

Prognostic significance of the presence of tertiary Gleason grade in robot assisted radical prostatectomy specimens in Japanese patients with clinically localized prostate cancer

(社会人大学院博士課程 4 年泌尿器科学)

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BACKGROUND AND PURPOSE: After ISUP modified the criterion of Gleason score, we often see the presence of tertiary Gleason grade in the official pathological report. We studied the patients with clinically localized prostate cancer who were treated with robot assisted radical prostatectomy (RARP) with a relatively longer follow-up period.

PATIENTS AND METHODS: We studied 600 Japanese patients who underwent robot assisted radical prostatectomy (RARP) for clinical stage T1-3N0M0 prostate cancer. Tertiary Gleason grade was evaluated according to ISUP criterion and its presence was correlated to pathological and prognostic outcomes. RESULTS: Of the 600 RP specimens 92 (15%) had tertiary Gleason grade 5 (TGG5). There were no differences in pathological stage and surgical margin status between GS 3+4 with and without TGG5 (GS 3+4+5) as well as between GS 4+4 with and without TGG5 (GS 4+4+5). Of the 600 patients, 92 (15%) patients had a biochemical recurrence after a surgery