A total of 158 patients met the inclusion criteria, 128 in no dysplasia group and 30 in low grade dysplasia (LGD) group. Median follow-up time was 42 (20.8, 86.9) months. In non-dysplastic group, there were 20 cases of LGD, 3 cases of HGD and 3 cases of cancer during follow-up. In LGD group, 4 progressed to HGD. None developed EAC in LGD group. There was no significant difference in terms of age, gender, race, BMI, 25(OH)D levels between progressors and non progressors (Table 1). Similarly, change in serum 25(OH) D levels was not found to impact progression to dysplasia/EAC by multivariable analysis.

Conclusion: There is no evidence to suggest that baseline serum 25(OH)D levels or change in the levels are associated with progression to dysplasia or EAC in BE patients. Vitamin D might not have a role as a chemopreventive agent for EAC.

Methods: A total of 52 AA with BE were identified and matched to 208 Caucasian controls. There were no significant differences between the two groups (Table 1). Patients without HGD/EAC on baseline biopsy and more than 1 year follow-up were included in progression analysis. There were 21 AA patients and 79 Caucasian controls with median follow-up of 38 months (P25, 75%: 21, 70). There were no significant racial differences in progression to dysplasia and EAC (Table 2).

Conclusion: This study includes the largest number of AA with confirmed BE reported so far. Interestingly, 46.2% of AA with BE in our study were women. There were no significant differences in the prevalence and incidence of dysplasia between AA and Caucasians with BE.

Methods: All AA with BE seen between 2002 and 2013 with confirmed BE, i.e., specialized intestinal metaplasia were included. AA cases were matched 1:4 to Caucasian controls. Variables such as age, gender, BMI, date of EGD, hiatal hernia size, BE length, and biopsy findings were recorded. Progression to low grade dysplasia (LGD), high grade dysplasia (HGD) or EAC was evaluated during the follow-up.

Results: A total of 52 AA with BE were identified and matched to 208 Caucasian controls. There were no significant differences between the two groups (Table 1). Patients without HGD/EAC on baseline biopsy and more than 1 year follow-up were included in progression analysis. There were 21 AA patients and 79 Caucasian controls with median follow-up of 38 months (P(25, 75%): 21, 70). There were no significant racial differences in progression to dysplasia and EAC (Table 2).

Conclusion: This study includes the largest number of AA with confirmed BE reported so far. Interestingly, 46.2% of AA with BE in our study were women. There were no significant differences in the prevalence and incidence of dysplasia between AA and Caucasians with BE.

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Is 18F-FDG PET/CT Useful for Selecting Right Candidates for Endoscopic Resection Among Patients With Superficial Esophageal Squamous Cell Carcinomas?

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Introduction: Preoperative evaluation of invasion depth and lymph node metastasis facilitates optimal treatment of superficial esophageal squamous cell carcinomas (SESCCs). Although 18F-fluorodeoxyglucose (FDG) PET/CT has been widely applied in advanced esophageal carcinomas, few reports are available on PET/CT for SESCCs, clinical significance of which has been remained controversial. Therefore, we first report our Chinese experience, and aims of the largest study to explore the characteristics of FDG intake and its clinical significance on decision-making of SESCCs, endoscopic resection or esophagectomy.

Methods: A total of 2,461 consecutive patients with confirmed esophageal carcinoma, who underwent endoscopic resection or esophagectomy from January 2007 to March 2014 in our hospital were analyzed retrospectively. Sixty-one SESCC patients (64 lesions) with preoperative PET/CT were enrolled. According to pathological invasion depth, lesions were divided into ≤sm2 surgery group (n=17) and ≥sm1 endoscopy group (n=47). Characteristics of lesions (endoscopy, pathology, PET/CT) were reviewed and analyzed.

Results: Of the 64 lesions, 24 lesions were visible and 40 were non-visible. Univariate analysis showed both qualitative and semi-quantitative FDG intake (visibility, SUVmax, SUVmax ratio A (lesion/liver), SUVmax ratio B (lesion/blood)) were related to age, longitudinal diameter, circumferential degree, non-flat or nodal type endoscopic appearance and invasion depth (P<0.05). But multivariate logistic regression analysis showed longitudinal diameter ≥40mm and invasion depth ≥sm2 were the only two influence factors (OR value=23.2,10.4; P<0.05). When visible lesions indicated esophagectomy and non-visible for endoscopic resection, sensitivity (Sen), specificity (Spe) and accuracy was 82.3% (14/17), 78.7% (37/47) and 79.7% (51/64). With a SUVmax cutoff of 2.30 for clinical decision-making of SESCCs, Sen, Spe and accuracy was 70.6% (12/17), 76.6% (36/47) and 75% (48/64), respectively. With Roedl PET/CT scoring system, SESCCs with invasion depth ≥sm2 score more in FDG uptake intensity, locality and eccentricity parameters than ≤sm1 (P<0.05). ROC curves indicated that eccentricity score ≥2 contributed to a highest diagnostic efficiency, with Sen, Spe and accuracy of 70.6%,87.2% and 82.8%.

Conclusion: FDG visibility and uptake are closely related to longitudinal diameter ≥40mm and invasion depth ≥sm2. Despite limited diagnostic value of primary SESCCs, 18F-FDG PET/CT is very useful for indicating esophagectomy or endoscopic resection for SESCCs. Roedl PET/CT scoring system could be applied in differentiating ≥sm2 SESCCs from ≤sm1. However, to reach a higher diagnostic efficiency, some modifications are still required.