which proved prevalence are different depending on race (10.35% Asian vs 1.51% White; P=0.027).

Conclusions We firstly report primary sites and racial heterogeneity of POLE/POLD1 mutation in CRC to call for more attention when designing clinical trials and data analysis.

IDDF2020-ABS-0039 TO COMPARE THE TISSUE DIAGNOSTIC YIELD OF SOLID LESION BIOPSIES BASED ON THE HISTOPATHOLOGICAL ANALYSIS OF ENDOSCOPIC ULTRASOUND-GUIDED FINE NEEDLE ASPIRATION (EUS-FNA) SAMPLES PRODUCED BY THE 19G PROCORE NEEDLE, STANDARD 19G **NEEDLE AND 22G PROCORE NEEDLE**

Mahesh Kumar Gupta*. Medanta-The Medicity, Gurgaon, Haryana, India

10.1136/gutjnl-2020-IDDF.48

Background EUS is a sensitive method for detecting intestinal and extra-intestinal mass lesions including lymphadenopathy. FNA allows evaluating cellular findings suggestive of malignancy but inflammation causes cellular changes undistinguishable from neoplasia solely based on the cytological evaluation, because tissue architecture and cell morphology are essential for accurate pathological assessment. Various EUS-guided techniques have been explored to retrieve tissue specimens with variable success and complication rates.

Methods All the Patients, above 18 years of age, having intestinal and extra-intestinal solid mass lesions including lymphadenopathy, were subjected to EUS guided FNA. Patients with cystic lesions refused to sign the informed consent and with coagulopathy (INR>1.5, Platelets <50000) were excluded from the study.

Results Total 215 patients were evaluated, out of which EUS-FNA was technically feasible in 210 (97.67%) cases. Three needle passes were made in every case. There was no significant difference between these three groups with regard to the age (p-value-0.676), gender (p-value-0.856), location (p-value-0.998), echogenicity (p-value-0.123), border (p-value-0.216), size (p-value-0.735 & 0.374) of the lesions and presence of calcification (p-value-0.093)or necrosis (p-value 0.729). Sample suitable for pathological evaluation was obtained in 90.5% cases with a tissue core in 45.7% cases. 28.1% lesions were malignant, 62.4% were benign and 9.5% remained undiagnosed. The histopathological diagnoses were possible in 87.1%, 90.0% and 94.3% cases respectively with 22G Procore, 19G Procore and 19G Standard needles (p-value-.350). Samples for the presence of blood clot in order of 19G procore (70.00%) > 22G procore (50.00%) > 19 G Standard (42. 8%), (P-value 0.003). There were no post-procedure complications noted in any group.

Conclusions Procore needles did not offer the extra possibility of obtaining a core sample for histopathological analysis in this study, but there is a high possibility of the presence of blood clots. Any of these three needles can be used for biopsy according to the availability and expertise of the endosonologist. The outcome depends on the experience of the endosonologist as well as the pathologist.

IDDF2020-ABS-0041

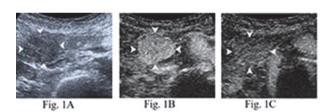
PANCREATIC NEUROENDOCRINE TUMORS: **CORRELATION BETWEEN THE** SONOGRAPHIC FEATURES AND THE PATHOLOGICAL TUMOR GRADE

Jingzhi Huang*, Xiaohua Xie, Manxia Lin, Ming Xu, Guangliang Huang, Xiaoyan Xie. Department of Medical Ultrasound, Division of Interventional Ultrasound, The First Affiliated Hospital, Sun Yat-sen University, China

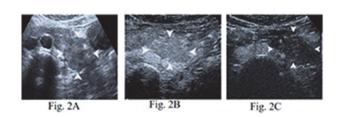
10.1136/gutjnl-2020-IDDF.49

Background It is confirmed that patients' prognosis of pancreatic neuroendocrine tumors (pNETs) were different according to different pathological grades. Imagings may predict tumor grades. We intended to analyse the value of contrast-enhanced ultrasound (CEUS) in the pathological classification of pNETs. Methods Eighty-six pNETs patients who underwent CEUS before pathologic diagnosis were retrospectively reviewed. Ultrasonographic features and enhancement pattern in each phase were analyzed among the three pathologic grades of pNETs.

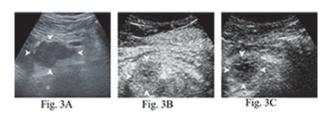
Results Eighty-six pNETs included 45 G1(52.3%), 29 G2 (33.7%), 12 G3 (14.0%). 48.9% (22/45) G1 tumors were less than 2 cm, while 93.1% (27/29) G2 and 100% (12/12) G3 were larger than 2 cm (G1 vs. G2, p < 0.001; G1 vs. G3, p= 0.001). 58.3% (7/12) G3 tumors had pancreatic duct dilatation and 41.7% (5/12) G3 had hepatic metastasis, which were more common than G1 tumors with both only 4.4% (2/45) had pancreatic duct dilatation or hepatic metastasis (p < 0.001, p = 0.002). On CEUS, G1 tumors ((figure 1A,1B) showed homogeneously hyper-enhancement in the early phase) more often menifested hyper- or iso- enhancement in the



Abstract IDDF2020-ABS-0041 Figure 1



Abstract IDDF2020-ABS-0041 Figure 2



Abstract IDDF2020-ABS-0041 Figure 3

A30 Gut 2020;69(Suppl 2):A1-A95