Introduction

POPS have been reported to be useful in the diagnostic of IPMN. This lecture intends to show the usefulness of POPS in IPMN for differential diagnosis between malignant IPMNs and benign ones, and classification of histopathological subtype.

Assessment of the tumor malignancy based on POPS findings

The protruding lesions assessed by POPS were classified into 5 groups: granular mucosa (type 1), fish-egg-like protrusions without vascular images (type 2), fish-egg-like with vascular images (type 3), villous (type 4), and vegetative (type 5). (Figure 1) Of them, more than 85% of villous and vegetative protrusions were malignant. Those protruding lesions were proved to indicate malignancy.

Assessment of the classification of IPMN subtype based on POPS findings

IPMNs are classified into four subtypes (gastric, intestinal, pancreatobiliary and oncocytic) based on their histomorphology. Recent studies have shown varied degrees of malignant nature and prognosis among these subtypes. We investigated the relationship between type of protrusion by POPS and histological subtype. Specifically, villous type was found to be closely connected with intestinal type. In addition, biopsy under direct vision by POPS was useful to offer not only pathological confirmation but also classification of IPMN subtype.

Conclusion

Pancreatoscopy provides useful information on surgical indication and resection line in IPMN. Biopsy under direct vision offers not only pathological confirmation but also classification of IPMN subtype.