**Color 1**  Endoscopic finding and ultrasonographic picture of the duodenal adenoma.

**Color 1-a**  Upper GI endoscopy showed a submucosal tumor in the posterior wall of the upper stomach measuring 2 cm in diameter with smooth surface.

**Color 1-b**  The tumor was tightened at the base with detachable snare ligation in order to avoid post-operative bleeding after the electrical resection.

**Color 2-a, b**  Upper GI endoscopy revealed a submucosal tumor in the anterior wall of the middle body, with a delle.

**Color 1**  Endoscopic picture of the case 1. A whitish IIa lesion measuring 20mm was observed in the ascending colon.

**Color 2**  Type II pit was observed on the surface of the lesion by magnifying colonoscopy.

**Color 3**  Histological findings of the case 1 (HE 10× 10). Tubular type serrated adenoma.

**Color 4**  Endoscopic picture of the case 2. A reddish IV lesion measuring 17mm was observed in the rectum.

**Color 5**  Type IV pit was observed on the surface of the lesion by magnifying colonoscopy.

**Color 6**  Histological findings of the case 2 (HE 10× 4). Tubulovillous type serrated adenoma.
**Endoscopic picture reveals an advanced rectal cancer. (case 1)**

**CT colonography shows an image like that of double contrast method of barium enema examination. (case 1)**

**Endoscopic picture reveals type IIc lesion on a fold. (case 4)**

**Advanced cancer and type IIa (LST-NG) lesion can be detected by colonoscopy.**

**Conventional endoscopy showed IIc+IIa lesion, 11 × 9 mm in size.**

**Mark the lesion with clips.**

**Endoscopic closed view of vessels in the submucosal layer under the lesion.**

**The submucosal layer under the lesion was dissected along the surface of the muscle layer.**

**Ila with a diameter of 2cm can be detected on the greater curvature of antrum. Marking was done outside the tumor.**

**After cutting along the marking Ila was resected by squeezing snare.**

**Upper row insulation–tipped diathermic knife lower row KD knife.**
**Color 1**  1. Close a grasping snare for a tip of the guide wire and introduce into the endoscopic channel.  2. Tip of the endoscope becomes near the bumper of a percutaneous endoscopic gastrostomy (PEG) catheter.

**Color 2**  Pictures show a guide wire using method for reinsertion of endoscopy in PEG-push method.  1. Near the mouthpiece.  2. In the lower thoracic esophagus.  3. In the stomach, fitting a PEG catheter bumper to the gastric wall.

**Color 1**  The endoscopic findings on admission: Dark red purple and soft elevated lesion on the posterior wall in the entire esophagus was noted.

**Color 2, 3**  Endoscopic findings on the fifth day of hospitalization: The size of the elevated lesion was reduced. There were some defects of the mucous in the lower esophagus.

**Color 4**  Endoscopic findings on the 22nd day of hospitalization: There remained a small elevated lesion and ulcer scars in the esophagus.

**Color 1**  Endoscopic view on the first admission showing severe but smooth stricture in the lower esophagus.

**Color 2**  Endoscopic view 4 days after the repeated balloon dilation showing re-stricture of the esophagus.
Color 1, 2 Esophagoscopy showed SSBE and a slight elevation at esophago-gastric junction.

Color 3 A slight elevated lesion with Methylene-blue stain.

Color 4 Endoscopic mucosal resection was performed with EMR-Cap method.

Color 5, 6 Histological findings of the EMR specimen revealed a well differentiated adenocarcinoma within mucosa.

Color 1 Endoscopic examination revealed a type 1 of esophageal tumor with marked esophageal stenosis.

Color 2 Histopathological finding of resected specimen taken from spinal tumor. a: H-E staining, b: Alcian blue staining.

Color 3 Immunostaining of specimens taken from spinal and esophageal tumor. Cytokeratin AE1/AE3 staining. a: esophagus, b: spine.

Color 1 Endoscopic picture showed a yellowish white sessile protruding lesion in the lower esophagus.

Color 2 Microscopic finding of tumor. Tumor was composed of spindle-shape cells. (HE, ×200)
症例

斎藤 聡，他論文
<本文82頁－83頁>

Color 1  Endoscopic picture at admission showing an irregular elevated lesion in the fornix of the stomach.
Color 2  Specimen of the endoscopic resection showing granuloma with remarkable infiltration of eosinocyte, neutrocyte and lymphocyte.

症例

木山輝郎，他論文
<本文84頁－85頁>

Color 1-a  The skin erosion and pigmentation of the chest before gastrectomy.
Color 1-b  The skin erosion of the chest was almost healed on the 13th post-operative day.
Color 2  Upper gastrointestinal endoscopy demonstrated the elevated lesion in the posterior wall and the lesser curvature of the gastric lower body.

症例

加藤尚之，他論文
<本文86頁－87頁>

Color 1  Upper gastrointestinal endoscopy on admission. A type 3 gastric cancer, as large as 25 mm in diameter, was recognized anteriorly on the greater curvature in the upper half of the corpus.

Color 2  Upper gastrointestinal endoscopy at the end of the first course of chemotherapy. Flattening of the elevation encircling the ulcerative lesion is noted, with reduction of the ulcerative basis in size.
Color 3-a  Pathohistological features are shown. The cancer cell was invased in the subserosa. (HE ×10)
Color 3-b  Pathohistological features are shown. Histologically, the cancer was poorly diffrentiated adenocarcinoma with minimally recognizable glandular structure. (HE ×200)

症例

森 潔，他論文
<本文88頁－89頁>

Color 1  Endoscopic pictures from antral side (left) and duodenal side.
Color 2  Endoscopic pictures from antral side.
症例 大場信之,他論文
<本文90頁－91頁>

**Color 1** Endoscopic photograph of PEG placement.
**Color 2** Endoscopic photograph of buried bumper syndrome.

症例 草野昌男,他論文
<本文92頁－93頁>

**Color 1** Endoscopic findings revealed edematous mucosa and stenosis of the duodenum with partially yellowish mucosa.
**Color 2** Surgical specimen revealed marked thickened yellowish wall, the stone was impacted in the neck and made fistula to the duodenum.

症例 光永眞人,他論文
<本文94頁－95頁>

**Color 1, 2** Endoscopic findings showed an yellowish elevated lesion with smooth surface in the second portion of the duodenum.

症例 高浜佑己子,他論文
<本文96頁－97頁>

**Color 1** Endoscopic examination showed a flat elevated lesion about 13mm in size at the second portion of the duodenum.
**Color 2** The lesion was resected with sufficient lateral margin.
**Color 3** Endoscopic examination showed a protruded lesion about 15mm in size at the second portion of the duodenum.
**Color 4** Endoscopic ligation with a detachable snare was performed.
**Color 5** Additional laser therapy was performed for the residual lesion.
症例 濱川拓人，他論文
＜本文98頁－99頁＞

Color 1  Endoscopic examination showed white colored flat elevated lesion (1 cm in diameter) in the anterior wall in the descending part of the duodenum. Infection of Helicobacter pylori in the remnant stomach was also proved.
Color 2  Endoscopic examination four months after the eradication of Helicobacter pylori showed no apparent change.

症例 井上 淳，他論文
＜本文100頁－101頁＞

Color 1  Endoscopic finding of the duodenal bulb. Two elevated lesions sized 5 mm and 7 mm were observed.
Color 2  Histological examinations of the bulbal carcinoid showed trabecular structure. The tumor cells have small-sized round shaped nuclei located in the middle of the cell. H-E stain.
Color 3  The tumor cells are immunohistochemically positive for anti-gastrin antibody.

症例 都築信太郎，他論文
＜本文102頁－103頁＞

Color 1  At 5 cm proximal ileum of the resection line, a stenosis due to ulcer of the small bowel was found.
Color 2  Macroscopic finding of resected specimen.

症例 大浦佳永，他論文
＜本文104頁－105頁＞

Color 1  An exposed vessel in the diverticulum in ascending colon.
Color 2  Closed diverticulum with clippings.
症例 上平晶一，他論文
(本文108頁－109頁)

Color 1 Colonoscopy on admission shows loss of the vascular pattern, diffuse granularity, and superficial ulcerations.

Color 2 Colonoscopy after 6 weeks shows ulcer scars and absent vasculature.

症例 鈴木隆三，他論文
(本文110頁－111頁)

Color 1 First endoscopic examination shows erosion of rectum and sigmoid colon.

Color 2 Histological finding at first endoscopic examination.

Color 3 Histological finding at second endoscopic examination.

Color 4 Third endoscopic examination shows better findings.

症例 植田健治，他論文
(本文112頁－113頁)

Color 1-a Colonoscopic view showed dark-purple colored mucosa with indistinct vascular pattern in the cecum.

Color 1-b Colonoscopic view showed a erosion in the transverse colon.

症例 新井陽子，他論文
(本文114頁－115頁)

Color 1 Colonoscopy shows acute linear ulcers in splenic flexure. These findings were compatible with ischemic colitis.

Color 2 Colonoscopy shows marked ischemic lesion with erythematous and edematous mucosa, and hemorrhage in sigmoid colon

Color 3 Histological examination shows edema, hyperemia, hemorrhage of interstitium and atrophy of crypts, loss of surface epithelium.
Color 1. Initial endoscopic examination, type Is early cancer was found as polyp with expansive growth in the sigmoid colon.

Color 2a, b The second endoscopic examination, 42 days later, the appearance came to alter very drastically to reveal the two storied arch structure of polyp on polyp and indicative of small type Is early cancer. Cancer was present at the rising part of the lesion.

Color 3a, b, c, 4

Color 3a The 3rd magnifying endoscopic examination, more 20 days later, the protrusion on the top previously pointed out thoroughly collapsed.

Color 3b Magnified image with crystal violet stain, pit pattern of type V, with pits of irregularly shaped and varying in size were discerned from the rising part to the entire lesion of elevation.

Color 3c The highly magnified image obtained from the internal concave in the depression, what it terms pit pattern of type V, which shows the complete destruction of pits were discerned.

Color 4 High-magnified image of the fig. 2 (No. c-r) (H. E. stain).

Color 1a, b, 1b CF finding: 15mm protuberant tumor with a central hollow and tumor vessels on its surface

Color 1b CF finding: structure collapsed surface and bridging folds

Color 2a Pathological finding: center of tumor. Main portion exists in submucosa.

Color 2b, c Pathological finding: Deepest portion. Tumor invaded to ss layer along vein.

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Color 2b, c Pathological finding: Deepest portion. Tumor invaded to ss layer along vein.

Color 3a A pedunculated but broad-based lesion lacking in mobility was discerned in the sigmoid colon.

Color 3b The surface looked uneven and reddened with depressed erosions and nodules.

Color 3a Magnified observation revealed the entire lesion composed of irregular pit pattern.

Color 3b On the surface of nodules pit pattern of V was discerned.

Color 3c Pit pattern of V was also discerned in the depressed portions.

Color 3 In stereomicroscopic pictures pit pattern of V was present in depressed portions.
症例 安達 滋, 他論文
＜本文122頁－123頁＞

Color 1-a Colonoscopic picture reveals a small elevated lesion with a central depression in the descending colon.
Color 1-b Colonoscopic picture with indigocarmine spraying clearly reveals a irregular-shaped depression on the lesion.
Color 1-c After submucosal saline injection, tumor is not elevated.
Color 2 Magnifying colonoscopic picture with crystal violet staining reveals type V pit pattern in a depressed area. But in the peripheral elevated area, almost normal pit pattern is observed.

症例 山岡昭治, 他論文
＜本文124頁－125頁＞

Color 1 Colonoscopic findings showing stenosis due to the tumor in the ascending colon.
Color 2 Colonoscopic findings showing fistula between the ascending and transverse colon after magnetic compression anastomosis.

症例 加藤真子, 他論文
＜本文126頁－127頁＞

Color 1, 2 Colonoscopy shows the lesion composed of aggregated nodules (laterally spreading tumor) on the fold of the transverse colon.
Color 3 The submucosa comes up after exfoliative EMR.
Color 4-a, b Macroscopic finding of resected specimen.
Color 4-c Cross section (H-E) of the endoscopically resected specimen. (well differentiated adenocarcinoma in adenoma, m, ly0, v0)
Color 5 Follow-up colonoscopy performed two months later reveals normal mucosa.

症例 落合高德, 他論文
＜本文128頁－129頁＞

Color 1 Laparoscopy showed yellowish brown sticky ascites of the right lower abdomen (left), and greater omentum adhered to upper peritoneum (right).
Color 2 Laparoscopic view of massive bleeding in the pelvis (left and right).
**Example 1**

Color 1: Endoscopic examination showed a elevated lesion at the posterior wall of the angulus and the antrum.

Color 1-a: Ninety nine days after first endoscopic examination, an ulcerative lesion with oozing was seen on the tumor.

Color 2: Histologic finding of distal bile duct.

Color 2-b: Immunohistochemical staining using anti-laminin antibody.

Color 2-c: Immunohistochemical staining using anti-CD44 antibody.

**Example 2**

Color 1: Endoscopic picture shows severe stenosis of duodenum.

Color 2: After EMS replacement for duodenal stenosis, endoscopic picture shows the good outcome for dilation.

**Example 3**

Color 1-a: EUS detected a hypoechoic tumor with a clear boundary and an irregular margin measuring 139x10.8mm in the pancreatic tail (yellow arrow). The pancreatic duct at the tail side of the tumor was dilated (red arrow).

Color 1-b: Color Doppler method observed no clear blood flow in the tumor.

Color 1-c: The contrast enhanced color Doppler method imaged a slight blood flow signal in the tumor margin but blood flow was poor in the entire tumor.

Color 2-a: The histopathological findings showed the feature of usual invasive ductal carcinoma and papillary adenocarcinoma was partially observed.

Color 2-b: In the pancreatic parenchyma on the papillary side to the tumor, reduction of aciner cells and fibrosis were observed, indicating chronic pancreatitis.

**Example 4**

Color 1: Endoscopic view of the papilla of Vater. Opening of the orifice of the papilla of Vater and mucin excretion (so-called "tear drop" sign) were seen.

Color 2-a: Macroscopic findings of the resected specimen. Dilated main pancreatic duct and a small mass at the distal main pancreatic duct were observed.

Color 2-b: Microscopic findings of the resected specimen. Invasion of IPMT to pancreatic parenchyma and intrapancreatic nerve was observed.