Peutz–Jeghers syndrome (PJS) is a rare, autosomal dominant condition that is characterized by hamartomatous polyps in the gastrointestinal tract and mucocutaneous melanin pigmentation [1, 2]. Confocal laser endomicroscopy (CLE) is rapidly emerging as a valuable tool for gastrointestinal endoscopic imaging, enabling the endoscopist to obtain an “optical biopsy” of the gastrointestinal mucosa during the endoscopic procedure [3–5]. Here, we present the case of a patient with genetically confirmed PJS who was referred for surveillance endoscopy. Endoscopy_UCTN_Code_CCL_1AD_2AC

Esophagogastroduodenoscopy revealed a large, polyoid mass of about 20 mm in diameter located in the gastric fundus (Fig. 1a). Pit pattern analysis using narrow-band imaging (Olympus, Tokyo, Japan) revealed large roundish and tubular pits (Kudo 3 L). After administration of 3 mL intravenous fluorescein 10% (Alcon Laboratories, Texas, USA), CLE (EG-3870 CIK, Pentax, Tokyo, Japan) was performed. Endoscopic histology revealed large, irregular cells with increased optical density and fluorescein leakage (Fig. 1b). According to these changes the diagnosis of high-grade intraepithelial neoplasia was made. Corresponding histopathological analysis confirmed the presence of low-grade intraepithelial neoplasia and a focal high-grade intraepithelial neoplasia as well (Fig. 1c).

Colonoscopy (Pentax EC-3870 CIFK, Tokyo, Japan) showed seven polyps ranging from 2 mm to 15 mm in diameter (Fig. 2a). CLE of the polyps showed disorganization of glands, occurrence of different cell types, and the presence of muscle fibers. Histopathological examination showed an overall villous architecture and markedly interdigitating smooth muscle bundles of varying thickness, which arose from the muscularis mucosae.

Competing interests: None

Endoscopy_UCTN_Code_CCL_1AD_2AC

H. Neumann1, M. Vieth2, M. Raithel1, J. Mudter1, R. Kiesslich3, M. F. Neurath1
1 Department of Medicine I, University of Erlangen-Nuremberg, Germany
2 Institute of Pathology, Klinikum Bayreuth, Germany
3 I Medical Clinic, Johannes Gutenberg University of Mainz, Germany

Neumann H et al. CLE for detection of intraepithelial neoplasia in PJS... Endoscopy 2010; 42: E139–E140
References

Bibliography

Corresponding author
H. Neumann, MD, PhD
Department of Medicine I
University of Erlangen-Nuremberg
Ulmenweg 18
91054 Erlangen
Germany
Fax: +49-9131-8535209
helmut.neumann@uk-erlangen.de