Chromoendoscopic Appearance of Collagenous Colitis – A Case Report using Indigo Carmine

A 78-year-old woman with no previous medical history and no medication, had a six-month history of chronic watery diarrhoea with up to 15 stools a day. Physical examination, laboratory tests and stool cultures were normal. At colonoscopy an abnormal vascular pattern was seen from the cecum to the descending colon with crowded, dilated and tortuous vessels (Figure 1a). Vital staining with 0.5% indigo carmine dye showed an uneven, coarse and nodular surface (Figure 1b). Microscopy of specimens taken from the cecum to the descending colon revealed a partly detached surface epithelium, thickened subepithelial collagen plate and inflammation in the lamina propria. Colonoscopy and biopsies from sigmoid colon and rectum
were normal (Figure 2a, b). Collagenous colitis was diagnosed based on the biopsy findings.

Apart from case reports (2–4) collagenous colitis is claimed not to be associated with any distinct endoscopic abnormalities. Our chromoendoscopic findings of subtle textural alterations in the proximal part of the colon are explained by the partial or complete detachment of the surface epithelium overlaying the thickened collagen plate seen on microscopy.

As chromocolonoscopy using dye-spraying enhances small textural changes of the mucosa (5), we suggest this method be applied in order to rule out minimal mucosal changes. A prospective investigation evaluating vital staining in this respect is under way.

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References

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Figure 1: Colonoscopy of the ascending colon showing a crowded, vascular pattern (a) and an uneven surface texture following dye-spraying with 0.5% indigo carmine (b).

Figure 2: Colonoscopy of the sigmoid colon showing a normal vascular anatomy (a), a normal, spindle network pattern after dye-spraying (b).