

Unusual diagnosis of malignant melanoma via cholangioscopy



A 75-year-old male patient was admitted to the emergency department with febrile temperature. The patient presented with multiple, very dark nevi all over his face and body, previously diagnosed as benign.

Laboratory tests revealed clear signs of cholangitis with elevated white blood cells ($16 \times 10^3/\mu\text{L}$), C-reactive protein (154 mg/L), bilirubin ($104 \mu\text{mol/L}$), alkaline phosphatase (595 U/L), gamma-glutamyl transferase (1456 U/L), glutamic oxaloacetic transaminase (95 U/L), and glutamic pyruvic transaminase (162 U/L). Ultrasonography confirmed a dilatation of the common bile duct (CBD) of 18 mm and showed hyperechoic material anterior to the ampulla Vateri without posterior acoustic shadowing (► **Fig. 1 a**). Endoscopic retrograde cholangiography (ERC) was performed and delineated a suspicious contrast-enhanced structure in the distal CBD that was easily mobilized but could not be extracted with either balloon catheter or basket (► **Fig. 1 b**). Cytological brushing and biopsy were performed, and a polyethylene stent (10 Fr/5 cm Flexima stent; Boston Scientific, Marlborough, Massachusetts, USA) was inserted. Subsequently, laboratory surrogates of cholangitis and the patient's temperature rapidly returned to normal. Owing to the suspicious finding, ERC was repeated with cholangioscopy (SpyGlass; Boston Scientific) and showed a darkly colored, polypoid tumor in the distal CBD (► **Video 1**). According to the multiple nevi, a suspicion of malignant melanoma was raised and staging examinations were recommended. Computed tomography of the thorax showed multiple, suspicious bipulmonary micronodules (maximum size 6 mm). Histopathologic examinations showed atypical infiltrates with expression of the melanocytic markers Melan A, HMB45, and S 100. The biliary lesion microscopically correlated with



► **Fig. 1** The tumor in the common bile duct. **a** Ultrasound. **b** Cholangiogram.



► **Video 1** Cholangioscopy showed the darkly colored, polypoid tumor in the distal common bile duct.

focal, highly atypical tumor cell aggregates. Both findings were consistent with a manifestation of malignant melanoma. The primary origin of malignant melanoma remained unknown.

Shortly before initiation of immune checkpoint inhibitor treatment, including nivolumab and ipilimumab for BRAF V600-negative stage IV melanoma, the patient sadly passed away.

The here presented case demonstrates the high diagnostic utility of cholangioscopy for rare diagnosis within the biliary tree.

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Competing interests

The authors declare that they have no conflict of interest.

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Bibliography

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