Quiz

CORRECT ANSWER TO THE QUIZ. CHECK YOUR DIAGNOSIS

Case report

Spontaneous expulsion of a colorectal leiomyosarcoma

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A 79-year-old Caucasian woman presented to our outpatient clinic with a freezer bag containing an irregularly shaped mass that had been spontaneously defecated 3 hours previously (Fig. 1). The patient reported a recent history of constipation and blood in her stool. Her past medical history included hypertension, hypothyroidism, obesity, and metabolic syndrome. A physical examination did not reveal signs of weight loss or anaemia. Histopathology of the mass revealed a tumour composed of sheets containing densely packed, elongated spindle-shaped cells with cigar-shaped centrally-located nuclei and abundant fibrillar eosinophilic cytoplasm. Mitotic figures were observed. There were also foci of haemorrhage,

Fig. 1. Macroscopic examination shows a heterogeneous fleshy mass measuring 8 × 4 × 4 cm

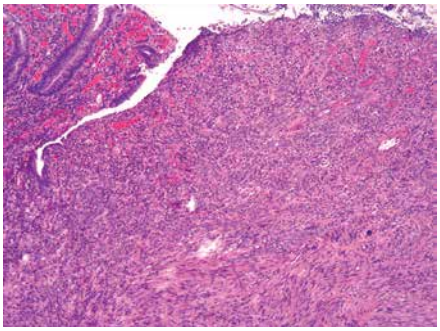

Fig. 2. Histopathological examination shows a pathological mass composed of densely packed elongated spindle-shaped cells

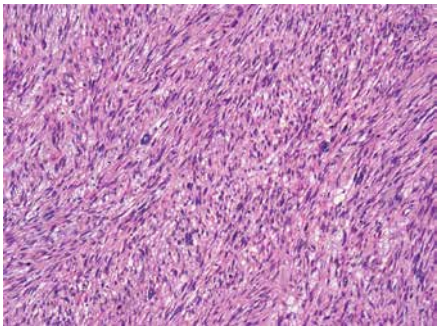

Fig. 3. Haematoxylin-eosin staining revealed spindle cells with nuclear atypia

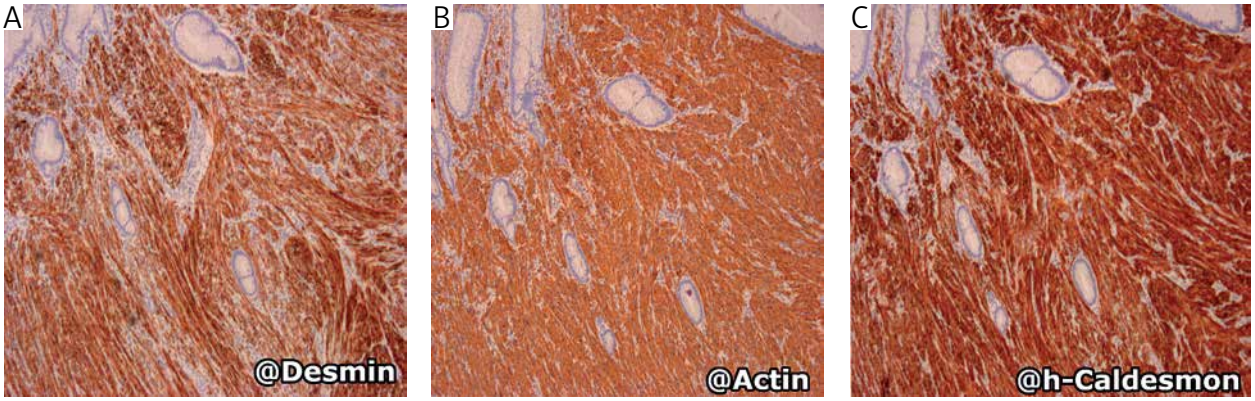

Fig. 4. Immunohistochemical staining revealed expression of desmin (**A**), actin (**B**) and h-caldesmon (**C**)

cystic degeneration, and necrosis (Figs. 2, 3). Immunohistochemical staining indicated that the tumour expressed SMA, desmin, and h-caldesmon and was negative for CD117 (c-KIT), CD34, and DOG-1 (Fig. 4).

After reviewing histology slides in a sarcoma reference centre, the tumour was diagnosed as a grade 2 (FNCLCC) colorectal dedifferentiated leiomyosarcoma. The mitotic index was 14 mitoses *per* 10 hpf in well-differentiated areas and 42 mitoses *per* 10 hpf in dedifferentiated areas. Rectosigmoidoscopy was performed and revealed blood clots in the lumen of the sigmoid colon near to the remnant of a small haemorrhagic pedicle. Two vascular clips were used to stop the bleeding. No metastases were identified. The case was reviewed by a multidisciplinary team, who decided to perform wide surgical resection due to the large size and dedifferentiation of the tumour and the endoscopic findings. The patient underwent a laparoscopic resection of the sigmoid colon without lymph node dissection. Histopathology of the resected tissue revealed fibrous and inflammatory changes without neoplastic lesions. The postoperative course was uneventful, and the patient was discharged 5 days after surgery. After 78 months of follow-up, the patient is still free of disease.

Colorectal leiomyosarcomas are tumours of poor prognosis with only a few cases described in the literature [1–3]. The clinical presentation does not differ from other colorectal cancers, as most are asymptomatic at the early stages and symptomatic forms (rectal bleeding or obstruction) appear later on. Radiological features are non-specific. Final diagnosis can only be confirmed after thorough histopathology examination of the biopsy sample or the resected specimen [4]. Leiomyosarcoma is characterized by sheets of spindle-shaped elongated cell proliferation associated with areas of tumour necrosis. The nucleus is usually blunt-ended or 'cigar shaped' and may be pleomorphic in poorly differentiated forms. Neoplastic cells express smooth muscle cell markers on immunohistochemical examination The main differential diagnosis is a gastrointestinal stromal tumour that presents histopathological similarities but has a positive staining to CD117 and CD34. In terms of mechanism, because most of the expelled colorectal lesions are pedicled, it has been suggested that the expulsions relate to ischaemia, possibly due to the large size of the mass, and colic peristalsis may have broken the pedicle [5].

The authors declare no conflict of interest.

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