Rare cause of a lower gastrointestinal bleeding

Amir Moussi, Ramzi Nouira*, Belgacem Bourguiba, Sami Daldoul, Abdeljelil. Zaouche.

*Service de Chirurgie Générale « A », *Service de Chirurgie Générale « B », Hôpital Charles Nicolle, Tunis, Tunisie.*
Université El Manar

A. Moussi, R. Nouira, B. Bourguiba, S. Daldoul, A. Zaouche.

Cause rare d'une hémorragie digestive basse.

LA TUNISIE MEDICALE - 2010 ; Vol 88 (n°12) : 961 - 963

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RÉSUMÉ

Prérequis : Les Léiomyomes du colon sont des tumeurs bénignes rares du muscle lisse.
But: Rapporter une nouvelle observation révélée par une hémorragie digestive basse.
Observation: Un homme âgé de 71 ans est admis en urgence pour rectorragie. L'examen physique était normal. L'Hémoglobinémie était à 3.7g/dl. La fibroscopie digestive haute était normale. La colonoscopie a montré un saignement actif provenant du colon droit sans pouvoir préciser le siège exact.
L'opération, faite en urgence, a montré une tumeur du colon droit de 8 cm. Une hémicolectomie droite a été faite avec une anastomose iléo-colique. L'histologie a conclu à un léiomyome. Le patient a développé en post opératoire une pneumopathie nosocomiale.
Conclusion: Les léiomyomes coliques sont rares. La détermination de l'index mitotique est d'une grande importance pour les différentier des léiomyosarcomes à faible risque de malignité qui ont un pronostic réservé.

Mots-clés
Léiomyome ; tumeur musculaire lisse ; tumeur stromale ; colon ; Immunohistochimie.

SUMMARY

Background : Leiomyoma of the colon are rare benign smooth muscle tumours.
Aim: Report a new case of colic leiomyoma revealed by gastrointestinal bleeding.
Case: A 71-year-old man, diabetic, consulted the emergencies for acute per-rectal bleeding. The physical examination was essentially normal. Haemoglobin level was 3.7g/dl.. The upper digestif endoscopy was normal. The colonoscopy showed an active bleeding from the right colon but it was enable to specify the nature and the exact seat of the bleeding lesion. An emergent operation showed a tumor of the right colic angle of 8 cm. A right hemicolectomy was performed with immediate ileocolic anastomosis. Pathology showed a leiomyoma. Postoperative course mentioned a nosocomial pneumopathy.
Conclusion: Colic leiomyomas are rare benign tumours. The determination of the mitotic index is of primary importance to differentiate them from the leiomyosarcomas of low rank of malignancy whose prognosis is unfavourable.

Key-words
leiomyoma; smooth muscle tumour; stromal tumour; colon; Immunohistochemistry.

Leiomyoma of gastrointestinal tract are not very common benign tumors. The colic localization is extremely rare. We report a new case of colic leiomyoma revealed by acute gastrointestinal bleeding.

CASE REPORT

A 71-year-old man, diabetic, consulted the emergencies for acute per-rectal bleeding. The physical examination was essentially normal, the hemodynamic constants were correct and the per-rectal examination did not reveal any mass or blood. His haemoglobin level was 3.7g/dl, the haematocrit was 11% and he had an acute prerenal failure. The upper digestif endoscopy was normal. The colonoscopy showed an active bleeding from the right colon but it was enable to specify the nature and the exact seat of the bleeding lesion.

The patient was operated on in emergency. At operation, it was a tumoral mass of the right colic angle of 8 cm of diameter. The tumor arises from under the mucosa and had an intramural developpement. The colic serosa facing this formation was normal with absence of mesenteric adenopathies. In addition, there were not synchronous colic lesions neither secondary hepatic lesions nor nodules of peritoneal carcinose. It was carried out a right hemicolectomy with immediate re-establishment of digestive continuity. The macroscopic examination noted a submucosal steady tumor of 8 x 5 cm with whitish and fasciculated aspect after section and seat of a central ulceration. Histologically, this formation was made of spindle-shaped cells deprived of atypies and organized longitudinally to intersected beams. There were neither mitoses nor hearths of necroses. The immunohistochimic study highlighted an intense and diffuse marking of the tumoral cells by the muscular smooth markers (actin and desmin) with negativity of the markers CD117 (C-Kit), CD34 and of the nervous markers. This aspect fit in a colic leiomyoma. The immediat follow up was complicated by a nosocomial pneumopathy.

DISCUSSION

The smooth muscular tumours represented essentially by the leiomyoma, constitute 1% of mesenchymatouse tumors of the gastrointestinal tract [1]. The leiomyomas are often localised on the oesophagus and the stomach [2]. The colic localization is extremely rare and represents less than 5% of the whole of the leiomyomas of the digestive tract [1, 3, and 4]. From 1875 to 1996, only 331 cases of colic leiomyomas were reported in the literature [4, 5].

The advent of the immunohistochimy allows to definitively separating the leiomyomas from the other mesenchymatouse tumours of the digestive tract, in particular the stromal tumours which are more frequent and have a different prognosis. The leiomyomas are characterized by a positive marking for the actin and desmin with absence of CD117 and CD34 as it was the case in our observation [1, 4]. Thus, the 331 cases reported in the literature are not all corresponding to the current immunohistochimic definition of leiomyomas, since the distinction between leiomyoma and stromal tumors were not usually possible before the advent of the immunohistochimy.

The colic leiomyomas occur essentially in the sigmoid colon [1, 2]. The right colic localisation was seen only in 18.4% of cases [4]. In 47.2% of cases, they have an exoluminal developpment and in 32.1% of cases, they have an intraluminal developpment which mime the aspect of a polyp [4]. The intramural developpment was seen only in 15.1% of cases as it was the instance of our patient [4]. The colic leiomyomas are often asymptomatic and discovered incidentally [1, 2 and 4]. Abdominal pain or palpable abdominal mass constitute the most frequent revealing mode [4]. Less frequently, they were discovered when a complication occured essentially gastrointestinal bleeding as is was the case of our patient. This complication is more frequent in gastric or small bowel localizations than in colic localisations [1, 2, and 4].

The treatment of colic leiomyoma is controversial. It may vary from a simple endoscopic resection to a subtotal colectomy [4, 6]. The treatment of choice is surgical and consists on a simple local excision [1, 2]. Wide resection is recomended in case of voluminous tumor, multiples localisations or if malignancy was suspected: large tumor > 5cm, presence of mesenteric adenopathy [7]. In our observation, the tumoral size and the absence of certitude about the histological benignity made us choose the realization of a right hemicolectomy.

Some endoscopic cases of resection of colic leiomyoma were reported [2, 3, 6]. They were essentially pedunculated tumours with intraluminal development.

The risk of colic perforation after resection of colic leiomyoma with broad base is very important as that was described by Cummings [8]. Some authors carried the interest of the endoscopic ultrasonography in the therapeutic choice of the colic leiomyomas [6]. Indeed, when the leiomyoma is pedunculated and developed from the second or the third layer of the colic wall (submucosa or the muscularis mucosae), the endoscopic resection is possible.

However, when it is developed from the fourth layer of the colic wall (muscularis propria), the endoscopic resection is not possible and can be dangerous. Some cases of tumoral recurrence and metastases were reported after resection of leiomyoma [9]. They let think of intermediate forms between benign leiomyoma and leiomyosarcoma of low rank of malignancy. The differentiation between these two entities is ensured by the determination of the mitotic index which rules the methods of the postoperative monitoring.

CONCLUSION

Colic leiomyomas are rare benign tumours. The immunohistochimy allow distinguishing them from the other mesenchymatouse tumours. The treatment is essentially surgical. The determination of the mitotic index is of primary importance to differentiate them from the leiomyosarcomas of low rank of malignancy whose prognosis is unfavourable.

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