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Appendiceal Mucocele in Sikasso Hospital: Report of A Case

Traoré B[1*], Diassana M[1], Diallo A[1], Coulibaly M B[1], Maïga A[2], Bah A [2], Touré L [3], Traoré T[3], Traoré S[4], Dembélé O[4], Traoré S A[5], Kanté M[6], Cissouma A[7]

[1]Sikasso Hospital General Surgery Department, Mali
[2]General Surgery Department Gabriel Touré CHU, Mali
[3]Sikasso Hospital Trauma Department, Mali
[4]Sikasso Hospital Urology Department, Mali
[5]Hospital Gynecology-Obstetrics Department de Sikasso, Mali
[6]Anesthesia and resuscitation department of the Sikasso hospital, Mali
[7]Pediatric department of the Sikasso Togo hospital, Mali

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***Corresponding author:** Traoré B

Abstract **Case Report**

Appendicular mucocele is a rare appendicular tumor characterized by dilation of the appendicular lumen with linear changes in the mucosa and hypersecretion of mucus. We report a case of appendicular mucocele in a 73-year-old patient. Clinically, there was pain in the right iliac fossa, nausea, sometimes vomiting, and a poorly defined mass palpated in the right iliac fossa. The abdominal ultrasound found an appendicular plastron and the complete blood count showed leukocytosis. The patient underwent an appendectomy and the operative consequences were simple, the pathological examination of the operative specimen concluded that there was a mucinous cystadenoma of the appendix.

Keywords: Appendicular mucocele, mucinous cystadenoma of the appendix, Sikasso (Mali).

INTRODUCTION

Appendage tumors are a rare entity, with an annual age-adjusted incidence of 0.12 cases per 1 million people [1]. Appendiceal mucocele or appendicular mucosecreting tumor is defined as fluid distension of the appendicular lumen by accumulation of mucus. Mucinous distension of the appendicular lumen may or may not be tumor-related, benign or malignant [2].

In the literature, it represents 0.15 to 0.6% of appendectomy parts [3]. Clinically, the majority of presentations are indolent and the diagnosis is most often made incidentally during appendectomy [1]. It can present as a pseudo-appendicular syndrome in 70 to 75% of cases [4, 5] and pose a differential diagnosis with the appendicular plastron [6]. Ultrasound and CT scan help place the

Etiological diagnosis [7, 8]. The diagnostic confirmation is histological; the treatment ranges from simple appendectomy in benign forms, to right hemi colectomy in malignant mucoceles [9].

We report a case observed in the General Surgery Department of Sikasso Hospital which will allow us to review the literature and discuss diagnostic and therapeutic modalities.

OBSERVATION

This is a 73-year-old patient with a history of high blood pressure for 5 years. He consulted us for pain in the right iliac fossa of moderate intensity which had progressed for two months with nausea and often vomiting with a feeling of fever.

On physical examination, pain and tusk were found in the right iliac fossa, a firm, sensitive mass, mobile in relation to the superficial and deep plane, with irregular contours, measuring 19cm by 9cm in diameter; the mass was not seen on digital rectal examination. Abdomino-pelvic ultrasound revealed a mass in the right iliac fossa measuring 191mm in length and 88mm in diameter, heterogeneous, probably of digestive origin, suggesting a tumor or an appendicular plastron.

A barium enema performed removed a cecal tumor. The blood count showed leukocytosis at 12,000

cells per cubic millimeter for hemoglobin level of 11 grams per deciliter.Faced with exacerbation of pain, the indication for a laparotomy was asked. We made a midline infra-umbilical incision which revealed a very limited mass, measuring 19 cm long by 9 cm in diameter at the expense of the appendix, the rest of the intra-abdominal organs, in particular the coecum, were unremarkable. We performed an appendectomy. Pathological examination of the surgical specimen concluded that there was a mucinous cystadenoma of the appendix without any sign of malignancy.

The postoperative follow-up was straightforward and the patient was discharged on D5. The follow-up at six months and then at one year was unremarkable at the clinical and para-clinical level.

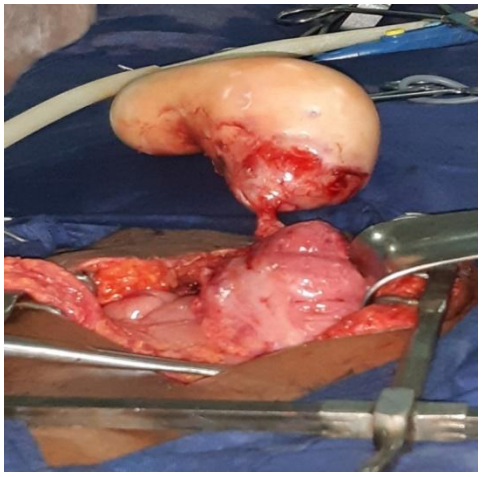

Fig-1: Intraoperative view of the mucocele

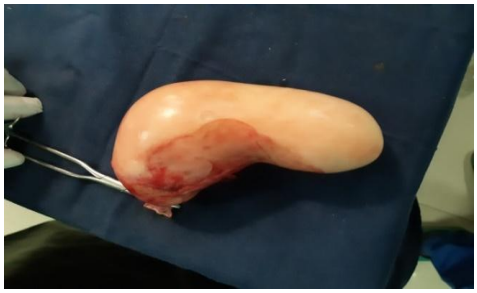

Fig-2: Appendectomy patch

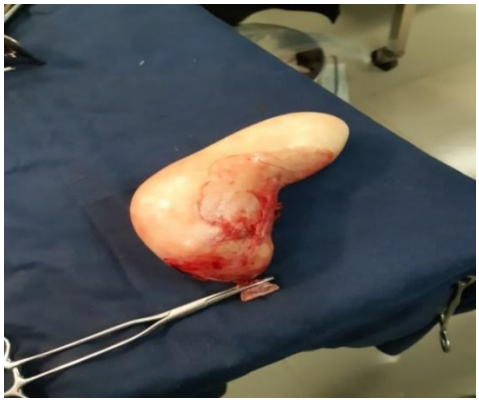

Fig- 3: Appendectomy patch

DICUSSION

Appendiceal mucocele or appendicular mucosecreting tumor is defined as fluid distension of the appendicular lumen by intraluminal accumulation of mucus. Mucinous distension of the appendicular lumen may or may not be tumor-related, benign or malignant [2].

Described for the first time by Rokitansky in 1842 and named by Feren in 1876, the appendicular mucocele is an uncommon affection representing 0.15 to 0.6% of appendectomies [3, 10]. This reported case is the first in our surgical practice at Sikasso hospital where pathological examination of appendectomy parts is systematic. Mucocele generally affects adult females with an age of between 50 and 60 years; it can also affect children between 4 and 13 years [11]. In our observation, it was a 73-year-old subject of male.

On the clinical level, the symptomatology is dominated by the pain of the right iliac fossa suggesting an appendicular syndrome, the mucocele poses a problem of differential diagnosis with the appendicular plastrons and the cecal tumors; the diagnosis is then intraoperative [6]. Ultrasound can help make the aetiological diagnosis by highlighting a cystic mass in the right iliac fossa with more or less hypoechoic content, on CT the mucocele appears as a mass with a cecal base, rounded and well limited, with a wall fine with fine parietal calcifications. Its wall may be thickened, irregular, with nodules taking the contrast [2].

In our patient's case, the symptoms were those of appendicular syndrome and the ultrasound showed a cystic mass in the right iliac fossa. Due to lack of financial means, we were unable to carry out a scanner. From an anatomopathological point of view, there are four types of histological lesions (in order of increasing severity) [2, 12]. The retentional cyst corresponds to the accumulation of mucus by obstruction of the appendicular lumen. In response to the obstruction, the mucosa becomes hyperplastic and hypersecreting; gradual degenerative changes occur with the appearance of cuboid cells. The appendicular wall becomes atrophic and may later be replaced by connective tissue. Epithelial villous hyperplasia the appendix is normal or slightly dilated with a thinned mucosa, lesions are limited to the mucosa and arranged in fine papillary structures without atypia or mitosis.

Mucinous cystadenoma (benign mucinous tumor): the appendix is dilated by mucus and the lumen is lined by a unistratified mucosecreting epithelium. Papillary formations may exist, but the epithelium is usually flat. Certain degrees of dysplasia can be found associated with atypia or mitosis. Mucinous cystadenocarcinoma (malignant tumor) is characterized by a high degree of cellular atypia and mitosis, connective invasion by neoplastic cells, and the

presence of neoplastic cells in the intraperitoneal mucosal effusion.

Histological examination of our patient's operative specimen concluded that there was a mucinous cystadenoma of the appendix The surgery consisted of a simple appendectomy without breaking the wall of the mucocele and without recurrence after one year of follow-up. The authors [7, 13] agree that a simple appendectomy is sufficient in the absence of a malignant lesion. In the event of a malignant lesion confirmed by an extemporaneous examination, a right hemicolectomy must be performed immediately, or a secondary one after the definitive histological diagnosis is certain is the treatment of choice.

This requires the systematic examination of any part of appendectomy as in our practice. The excision of an appendicular mucocele during an appendectomy must be done absolutely without breaking its wall Because the rupture of an appendicular mucocele, whatever the stage, in the peritoneal cavity results in a pseudo peritoneal myxoma also called " gelatinous disease of the peritoneum. Its prognosis varies depending on whether it is an adenoma or a mucinous adenocarcinoma, but pseudo peritoneal myxoma remains a serious condition [14].

CONCLUSION

When faced with an appendicular syndrome associated with a mass in the right iliac fossa, one must think of the appendicular mucocele. Ultrasound coupled with a scanner confirms the etiological diagnosis. Management consists of a simple appendectomy without breaking the wall in the absence of malignancy. Routine examination of any appendectomy patch should be the rule.

Conflicts of Interest

The authors declare no conflict of interest.

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