Case Report

General Surgery

Penetrating Wound of the Abdomen by Cart Stretcher Sikasso Hospital General Surgery Department

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Abstract

In our surgical practice we have experienced abdominal trauma by stretcher. The case we are reporting to you was a 65-year-old subject who was the victim of a motor-cart type traffic accident with piercing of the abdomen. by stretcher and taken to Sikasso hospital. A laparotomy made it possible to discover mesenteric contusions, hemoperitoneum without visceral lesion. We aspirated 200ml of hemoperitoneum after extraction of the stretcher, closure of the abdominal wall. We propose to review the literature in order to discuss the therapeutic modalities. **Keywords:** Penetrating wound - abdomen - trauma - Cart stretcher.

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INTRODUCTION

A wound is said to be penetrating the abdomen, when the injuring agent has created a solution of continuity of the abdominal wall with peritoneal invasion. When it is complicated by visceral involvement, the wound is said to be perforating [1, 2]. Penetrating wounds of the abdomen by cart stretcher are rare because we have not encountered any cases in the literature. The case we are reporting to you is a first in our surgical practice at Sikasso Hospital.

We propose to review the literature and discuss the methods of management.

OBSERVATION

It was a 65-year-old farmer living in a rural area who was the victim of a motor-cart type road traffic accident with piercing of the abdomen by the stretcher. The patient on his motorcycle at high speed came to hit a cart with reception of a stretcher on the left side with piercing of the abdomen. There was no loss of consciousness. He was rescued by passersby who had the good reflex to leave the 1 meter piercing bar in place and cut him off the cart.

The patient was transported with the iron bar to the hospital. On clinical examination the patient was conscious with a Glasgow score of 15/15, he had good conjunctival staining, blood pressure at 100/70mmHg; pulse at 88 beats/min, respiratory rate at 20 cycles/min; the temperature at 38.2oC.

The iron bar was in place piercing the left flank with a 10cm diameter entry hole and a 15cm jagged edge exit hole. There was a periorificial hematoma and minimal bleeding. A generalized abdominal defense was noted.

Elsewhere there was no evisceration, hematuria or orthopedic lesion; the external genitalia were unremarkable.

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The hemoglobin level was at 13g/dl, the hematocrit at 40.1% and the PT at 75%. After conditioning the patient and administration of antitetanus serum, the indication for an exploratory laparotomy was retained and the approach was a left lumbar transverse incision straddling the bar. The laparotomy revealed a hemoperitoneum of 200ml a lesion of the transverse, internal and external oblique muscles and mesenteric contusions.

There was no digestive perforating lesion or lesion of the urinary tract. We proceeded to the extraction of the iron bar, a debridement of the piercing wound, an abundant toilet and a drainage of the abdominal cavity.

The postoperative course was simple, the patient was discharged from the hospital on the 5th day. His examination was normal at 01 month, 03 month, 06 month.



Figure 1: Image of the stretcher perforating the left flank



Figure 2: Image of the stretcher perforating the left flank



Figure 3: Image of the stretcher during surgery



Figure 4: Image of the stretcher during surgery



Figure 5: Image of skin closure



Figure 6: Image of wound healing

DISCUSSION

The frequency of penetrating abdominal wounds by firearms or stab wounds has increased in recent years due to the increase in crime and conflicts in urban areas and often in rural areas [3]. The average age of patients is 27.7 [4], young subjects are more exposed to the circumstances of occurrence.

The case of our 65 year old patient occurred after a motorcycle-cart type traffic accident in a rural environment. The current management of penetrating abdominal wounds is controversial.

In penetrating wounds of the abdomen, hemodynamic stability is the first element to take into account because uncontrolled bleeding is the first cause of death. Our patient was hemodynamically stable. Computed tomography, a capital examination for the detection of visceral lesions, could not be performed in our case because of its cost.

The classic attitude, systematic exploratory laparotomy and the non-operative attitude known as selective abstentionism [5, 6]. The high rate of white laparotomy has been widely found in the literature [7].

CONCLUSION

Abdominal gunshot wounds are not uncommon in the literature. In our surgical practice, the piercing of the abdomen using the cart stretcher is an exception. The diagnosis is clinical. Only rapid and multidisciplinary management can improve the prognosis. Ultrasound coupled with the scanner allows a good assessment of the lesions.

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