



Rhabdomyolyse secondaire à la prise de cocaïne : A propos d'un cas Rhabdomyolysis after taking cocaine: about a case

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ABSTRACT

The diagnosis of acute rhabdomyolysis of toxic origin and, in particular, when it is due to stimulants psychos is often overlooked. Early diagnosis allows the prevention of possible complications, including kidney. The incidence of drug-induced rhabdomyolysis is uncertain because most cases are not reported. As the mortality rate is unknown. We present this observation in order to draw attention to this syndrome, which has been so far, often overlooked but is likely to become increasingly common in the coming years because cocaine is increasingly consumption especially among young people. The observation concerns a 22 year old patient with no history especially living in India for four months using cocaine and cannabis regularly admitted to a poor general condition with impotence of the right leg. Clinical examination noted a significant extracellular dehydration and biological stigma of rhabdomyolysis with hyperkalemia. Good clinical and biological evolution after medical treatment and three sessions of dialysis. If the outcome was favorable for our patient this is not always the case in the literature given the large number of complications that can be induced by this drug. Clinical and biological classification of Brody et al can be used as a simple tool to aid in the management prognostic and therapeutic management. The etiological diagnosis of rhabdomyolysis this allows a cure preventive and especially through an outlet addictologique.

INTRODUCTION

The diagnosis of acute rhabdomyolysis by toxic, especially when it is due to stimulants psychos is often overlooked. Early diagnosis of this table could allow, in addition to support muscle damage itself, the prevention of possible sometimes severe complications related to taking cocaine.

MATERIALS AND METHOD

observation:

22 year old patient, with no particular history hospitalized for functional disability associated with right lower chest pain and profuse vomiting member. In addition he reported having used cannabis and snorted cocaine 15 days before admission.

Physical examination revealed a stable afebrile patient hemodynamically with right upper quadrant pain and signs of extracellular dehydration.

The skin examination noted inflammatory infiltrates of the right thigh, the deltoid and numerous abrasions of the lower limbs. On musculoskeletal pain level of the thigh and right hip. The cardiovascular examination and pleural lung were unremarkable.

Initially, the laboratory tests had found severe acute renal failure (serum creatinine to 1303 micromoles / L urea and 80 mmol / l). Muscle enzymes were elevated (CPK to 9865 IU / l) as myoglobin associated with hepatic cytolysis. Also there was a biological inflammatory syndrome (CRP 62 mg / l, fibrinogen 5.1 g / l). The blood count was normal. There was no stigma DIC. Troponin was normal.

Infectious balance remained negative including HIV positivity. Supplements CH-50, C3 and C4 were normal.

Search for antinuclear antibodies, ANCA and anti GBM was negative.

The ECG and chest X-ray were no anomaly.

Abdominal ultrasound was normal without obstruction on the urinary tract. Ultrasound of the left thigh had objectified edematous area of 20/20 mm surrounded by a hyper echogenic halo of unknown specificity (fig 1); hence the use of magnetic resonance imaging found that multiple muscle infarction randomized interesting the vastus muscles right, wide right with intermediate focal necrosis of the vastus left, middle and gluteus maximus rights and the internal shutter right area without abscess associated with significant edema of the soft tissues (Figure 2.3 and 4).

Before this picture, the diagnosis of acute renal failure secondary to acute tubular necrosis present a toxic rhabdomyolysis after inhalation of cocaine was chosen, thus removing a potential pyomyositis initially suspected in the very appearance of inflammatory skin and muscle damage.

Therapeutically, overhydration was initially established but signs of intolerance and uremic oligoanuria led to perform a renal replacement therapy on a femoral catheter. In total, the patient received three hemodialysis sessions with excellent hemodynamic tolerance.

The outcome was favorable, biological control D7 noted an improvement in renal function with a creatinine 226 mol / l and a regression of the inflammatory syndrome and the rate of muscle enzymes.

Although aware of the seriousness of his conduct, the patient refused any treatment addictologique pretext that he wants and he can do it alone. It has been lost sight of since his discharge.

RESULTS AND DISCUSSION

For millennia, the coca leaf is used by Andean people for religious, therapeutic, or social. In 1860, the active ingredient of the coca leaf is discovered: he was named naturally "cocaine." Cocaine is also used medically as a local anesthetic. Freud was the first physician to describe its use nasally.

Late 19th century, the first cases of cocaïnomanies appear compromising its therapeutic use. Since 1921, cocaine is prohibited except for medical use.

The non-traumatic rhabdomyolysis was first reported by Grossman et al in 1974 (1). The substances involved are alcohol (2,3), Cocaine (4, 5,6), Amphetamines (7), the Amphotéricine B (8,9), Heroin (2, 10,11) fenfluramine the (7), the Aminocaproic acid (12), Phencyclidine (13), erythromycin (14) and Lovastatin (15,16).

Although myoglobin is probably directly responsible for renal disease (17,18), increased CPK was used as a marker of rhabdomyolysis by Brody et al have tried to predict the severity of the cocaine-induced rhabdomyolysis according CPK levels and parameters defined as baseline risk factors (19). They grouped the risk factors in mild, moderate and severe. Severe risk factors include events involving life-threatening reactions such as seizures, coma, hypotension, arrhythmias or cardiac arrest. Patients who have a high risk of renal damage, typically have more than two risk factors, and a peak CPK above 20 000 U / l. Average risk factors include dementia, agitation, fever, leukocytosis, and renal failure. Patients in this group were typically characterized as rhabdomyolysis secondary to the effort, and had a mean CPK 10,897 U / l. All patients have improved with hydration and, in some cases, mannitol. No cases required the use of dialysis. Slight risk factors are anxiety, tachycardia, dyspnea, and chest pain. Patients in this group had CPK between 500 to 1500 U / l.

Our patient underwent three hemodialysis sessions while it showed only two criteria for moderate risk group. This condition can be explained by the presence of other nephrotoxic factors such as acidosis and dehydration favoring the precipitation of myoglobin in the renal tubules. The dialysis was motivated by anuria despite good hydration and alkalization and no improvement in renal function. In our case, favorable with good recovery of renal function was the result of early treatment with rehydration, alkalizing and hemodialysis as needed to avoid own rhabdomyolysis generally unfavorable evolution and cocaine in particular can develop life-threatening.

Proposed by Brody et al (19) classification can be of great prognostic and therapeutic value as well the consideration of all prognostic factors for rhabdomyolysis in general.

It is imperative that the patient confidence to admit taking illegal substance especially among young people, which may explain the rhabdomyolysis of unknown cause, at first, to establish a multidisciplinary approach which addictologie as a preventive measure in order to avoid relapse.

CONCLUSION

Cocaine use is a public health problem. In addition to the strong dependence it entails, this drug is associated with a variety of complications that may develop life-threatening, including rhabdomyolysis it will know to look. The acute effects of cocaine are not necessarily dose-dependent and may occur during the initial use or after prolonged use. In addition to all own complications rhabdomyolysis evolution can be fatal particularly in relation to the complications of cocaine.

iconography:

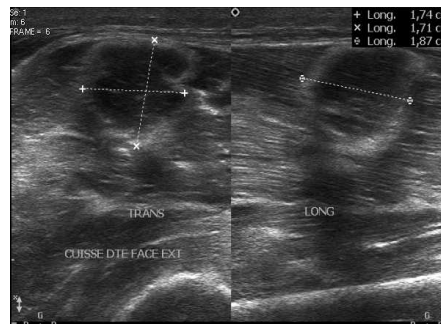


Fig. 1: Ultrasound of the right thigh injury hypoechoic necrosis in the right vastus lateralis muscle.

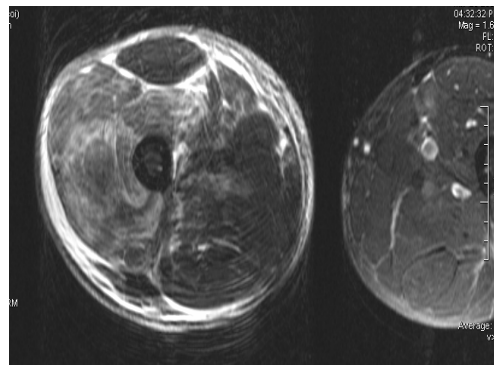


Fig. 2: MRI: super light signal in T2 with peripheral rim hyper T2 of inflammatory origin.

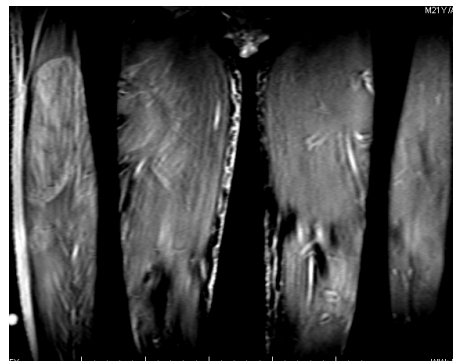


Fig. 3: coupe coronale: lésion en hyper signal T2.

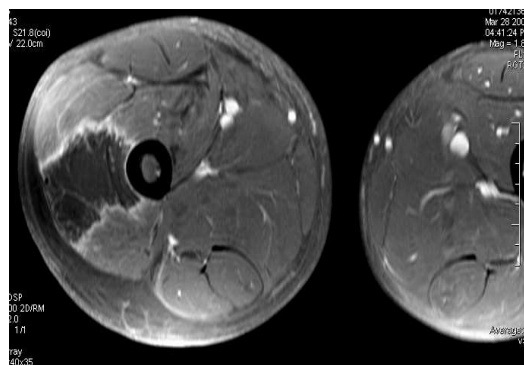


Fig. 4: lesion hypo signal with a signal enhancement in device after gadolinium injection.

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