Voluntary ingestion of metallic objects in prisoners-A report of two cases

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Abstract: Voluntary ingestion of metallic materials is a phenomenon rarely reported in the literature especially in our context. We report two cases of young prisoners who submitted multiple metal body ingestions and we draw intentions on the importance of psychological support for patients.

Keywords: Voluntary ingestion, prisoners, endoscopy, psychological support

INTRODUCTION
Ingestion of foreign bodies is relatively common; it can be potentially serious and achieve a real emergency. It can be voluntary or accidental. Voluntary ingestion of foreign bodies is mainly described in the context of severe psychiatric disorders associated with significant impulsivity. We report two cases of young prisoners who voluntarily ingested multiple foreign bodies collected in Gastroenterology department of University hospital of Mohammed VI in Marrakech, and we draw attention to the importance of psychological support to inmates in our context.

OBSERVATIONS
Case 1
A prisoner aged 28, with no particular history consulted the emergency department for epigastric pain occurred two days after the voluntary ingestion of a teaspoon in addition to four batteries. The abdominal examination was normal. The abdomen without preparation shows the existence of the spoon in the regions corresponding to the gastric area and batteries in the intestine (figure 1). The upper gastrointestinal endoscopy with general anesthesia allowed the endoscopic extraction of the spoon (Figure 2), subsequently, control of abdomen without preparation showed the progression of batteries along the digestive tract until their expulsion in the stool.

Fig 1: abdomen without preparation cliche showing the spoon in intragastric position in addition to 4 batteries.
Case 2
A young prisoner of 19 years was examined in the emergency service for epigastric pain occurred 24 hours after voluntary ingestion of a razor blade wrapped in plastic and electric battery. The abdominal examination was normal. The abdomen without preparation showed the existence of blade in the region corresponding to the gastric area in addition to a battery (Figure 3). The upper gastrointestinal endoscopy allowed the endoscopic extraction with a diathermic snare of the blade without complications. The abdomen without preparation control showed the progression of the electric battery along the digestive tract until their expulsion in the stool.

Fig 2 Extraction of the spoon through the diathermic snare successfully

Fig 3: abdomen without preparation cliche showing the razor blade in intragastric position in addition to a battery
DISCUSSION

Ingestion of foreign bodies is common, but its real incidence is difficult to determine. In the United States, 1500 deaths annually are attributed to ingestion of foreign bodies, underlining the high frequency of this type of ingestion. [1]. Ingestion of foreign bodies may be voluntary, but in 52-97% it is accidental [1]. She interested in 80% of cases children in oral phase with a peak frequency between six months and three years [2]. Psychotic or alcoholic patients are at risk patients as well as prisoners, Voluntary ingestion of metallic objects is an accident reported regularly in prisons and the prevalence reported by the work varies and remains undetermined. European studies have reported 261 cases and American studies have reported 167 cases [3]. In most cases, the razor blade was the ingested object. Other objects were used: glass, toothbrush, battery, watch, coins, sharp and pointed metal objects (nails, pins, needles, thumbtacks) [5, 6]. Ingestion of these foreign bodies is often hidden. It can be found following the appearance of symptoms of high variability: abdominal pain, fever, vomiting, constipation, haematemesis, and melena [7]. Sullivan et al. found in their study that the symptoms are often severe among prisoners, compared to other patients. [5]. The ingestion of metal objects in these patients usually falls within the framework of severe psychiatric disorders with a significant impulsivity [7]. Foreign body ingestions are often repetitive, and performed to relieve anxiety without suicidal intent. They are nevertheless considered suicidal equivalents. In prison, a large majority of patients had not realized an ingestion of foreign bodies before their first incarceration. [7]. In published series and in the majority of cases (67% to 80%) foreign bodies, ingested among prisoners once in the stomach level, can be eliminated spontaneously [8] and the need for hospitalization is not indicated except in 7% to 33% of cases. Digestive endoscopy has revolutionized the management of gastrointestinal foreign bodies especially their endoscopic extractions. the rate of success is reported by 19.5% to 53.9% of cases [9-10]. However, the surgery is necessary sometimes up to 30% cases [1,2, 3,8,] although more recent series reports lower rates (<15%) of operational response in this population [1, 2]. Several recent studies insist on preventing the ingestion of foreign bodies mainly repetitions in detention establishment, hence the importance of a psychiatric support for these people [11]

CONCLUSION:

Ingestion of foreign bodies voluntarily is rare, but remains grave and complex in detention centers, surgical management should be avoided, a strategy of surveillance and prevention should be developed at these centers especially to prevent recurrences.
REFERENCES