

Botulinum Gastroparesis, A Case Report

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Abstract

Case Report

Botulinum gastroparesis is a very rare pathology, complicating a botulinum toxin infection following ingestion of contaminated food, it is characterized by uncontrollable vomiting not responding to antiemetic treatment associated with a significant neurological syndrome, the diagnosis is made by abdominal CT scan without and after injection of PDC for possible elimination of a mechanical obstruction and following a history of ingestion of infected food, the evolution is marked following the taking of the botulinum antidote, by an improvement in digestive and neurological symptoms.

Keywords: gastroparesis, botulinum, botulism, canned.

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INTRODUCTION

Gastroparesis is a functional digestive disorder defined by a slowing of gastric emptying in the absence of any organic mechanical obstacle [1].

The cardinal symptoms are nausea, vomiting, postprandial fullness and early satiety.

Through the experience of our department, we will analyze the results of a rare aspect of botulinum gastroparesis via its radiological character on ultrasound and CT scan.

OBSERVATION

19-year-old male patient, university student.

Presents in a neurological picture consisting of: bilateral unresponsive mydriasis, blurred vision, associated with a digestive picture consisting of: uncontrollable vomiting, constipation and abdominal pain, anorectic, all evolving in a picture of deterioration of the general condition for 1 month.

✓ ATCDs:

- Everything changed a few days after taking a preserved food (can of tuna), with an expiry date that had expired two weeks ago.
- No medication or drug intake or similar cases in the family.

✓ Para Clinical Examination: Without Anomaly

- Standard biological assessment (NFS, GAJ, ionogram, renal function), microbiological and parasitological
- Ophthalmologic examination: (apart from mydriasis)
- Brain MRI
- Oesophagogastroduodenal fibroscopy: gastric distension, without detectable thickening

DISCUSSION

Clostridium botulinum is a Gram + bacillus, strictly anaerobic, lives in preserved foods: mortadella, ham, cold meats, canned vegetables (asparagus, green beans, etc.), fish, contaminated honey which is the only food known to transmit infant botulism.

Its mode of transmission is by ingestion of preformed botulinum toxin in food, or by injury or exceptionally, following the injection of botulinum toxin for therapeutic or cosmetic purposes (botox) [2].

This bacteria binds to the effectors necessary for the exocytosis of acetylcholine, blocking its release, resulting in muscle paralysis.

Ultrasound is the first paraclinical examination to be requested in the event of uncontrollable vomiting not revealing any notable abnormality other than significant gastric distension without clearly identifiable mass or mass syndrome.

Supplemented by a CT scan, significant hydro-aeric gastric distension visible at the gastro-duodenal level with thinning in places of the gastric wall without

signs of associated parietal suffering (Figure 1) or other mass or mass syndrome.

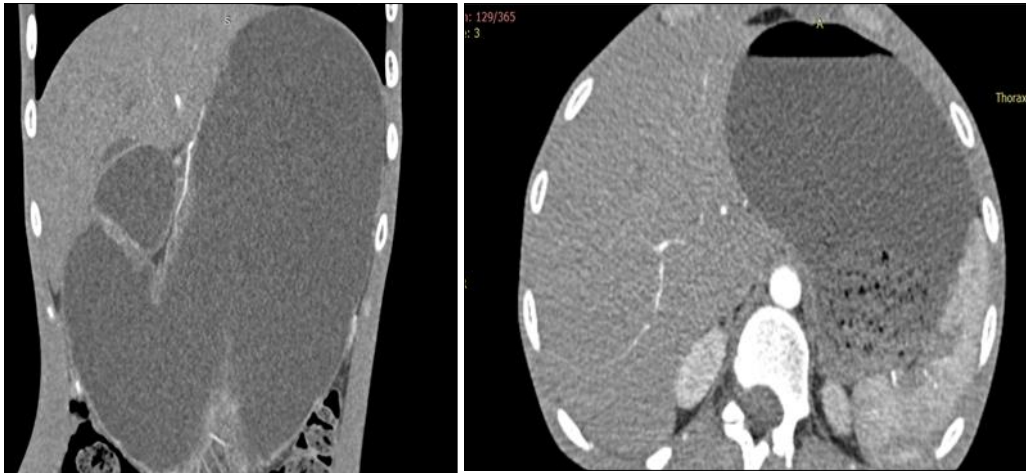


Figure 1: On fluoroscopy: Decreased or absent gastric peristalsis associated with gastric dilatation and delayed emptying of barium

CONCLUSION

- ❖ **Positive Diagnosis:** History of taking food contaminated by CB and clinico-radiological.
- ❖ Improvement of clinical symptoms is favorable under treatment.
- ❖ Treatment is based on a specific antidote for CB:
 - Targeting free toxins in the bloodstream and those attached to the digestive tract.
 - Not effective on colonies attached to axon terminals
 - Single injection

- No studies on efficacy in late cases
- Not available in Morocco.
- ❖ Partial gastrectomy.

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