Complex abdominal wall reconstruction. Our experience with botox for Hernias with Loss of Abdominal Domain in component separation technique

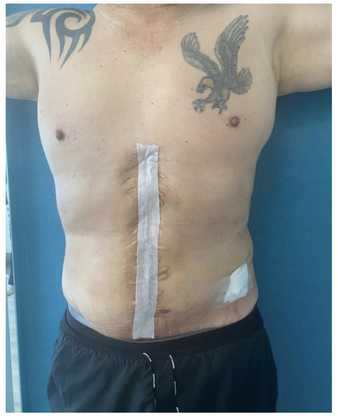
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INTRODUCTION

Loss of domain usually refers to the clinical scenario where more of the viscera is outside of the abdominal cavity than the inside. Difference in abdominal cavity pressure, when sudden reparation can lead to great intra-abdominal pressure with fatal pathophysiological implications. Without the proper preparation of the abdominal wall the surgical treatment is challenging leading to intra-abdominal hypertension after the herniated content is returned to the cavity. For the repair of these hernias we have different. approaches and techniques, in the case of Botulinum toxin A (BTA), muscles decreases the thickness and increases its length. BTA is a neurotoxin derived from the bacteria clostridium botulinum, when injected into muscle tissue, it causes a temporary flaccid muscle paralysis; this effect peaks around 2–4 weeks after injection and decreases in the months after.







CASE PRESENTATION

We present a case of a 61-year-old male involved in a gunshot attack with multiple injuries to the thorax, abdomen and bowel perforation in 2018. He was managed with exploratory laparotomy and stayed with a Bogota Bag while the wounds closed and abdominal pressure ceased, with closure 3 months later suffering a ventral hernia with loss of domain. We reconstucted 4 years later with an adequate protocol of Botox using 250 Disport UI per side, administered in 5 different abdominal points in each side (50U each point) also in the intraoperative management we use bioabsorbable mesh (3D max large) and components separation technique. Postoperative physical therapy was applied to. The patient did not experience any recurrence after his abdominal wall reconstruction and remains alive at the time this case was written.

DISCUSSION

The reconstruction of abdominal wall hernias with loss of domain is still an unclear field in which different approaches could be used in order to obtain the best possible results for the patient.The preoperative planning is one of the most crucial steps in obtaining the best results with the less amount of complications. In this case we use BTA and wait 6 weeks in order for the toxin to be at their best performance.

CONCLUSIONS

There are multiple alternatives to reconstruct midline defects. The component separation technique with botox repairs extensive defects returning functionality to the abdominal wall. It is a procedure that is not free of complications, however, in our experience it is stable over time without evidence of recurrence during follow-up. An adequate evaluation and selection of each case is recommended.