

Hiatal hernia after surgical treatment of GERD. A new disease.

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Few operations are as widespread as those dedicated to the surgical treatment of gastroesophageal reflux disease (GERD). Currently there are impressive case series of such procedures, one can even assume a certain medical precipitation in indicating them.

When discussing early or late complications, the tendency is to evaluate technical or evaluation failure, listing short, poorly positioned or too tight fundoplication, esophageal axis torsion, excessive hiatoplasty tightness, inappropriate indication in patients with achalasia or collagen disease, ischemia of the gastric fundus, by excessive release, or in the place of the stitches, by excess of force when applying the nodes, promoting, respectively, atrophy and dehiscence. Short esophagus is also mentioned, which causes infradiaphragmatic fundoplication to be tensioned and ready to migrate above diaphragm with minimum effort.

However, there is still much to be considered when indicating the surgical treatment of GERD, even starting from normal extension of the esophagus and surgical procedure that correctly obeys all the principles of indication and performance.

The esophageal hiatus may be extended or not, but it is true that, when releasing the distal esophagus, it will lack one or more stitches for anatomical restoration of the correctness that it must maintain in relation to the organ that pervades it. And the original anatomical fixation was irretrievably lost.

From this arises:

- a. We have, if there wasn't already, an area of diaphragmatic weakness;
- b. There is muscle-muscle suture, which requires at least six months to acquire strength and elasticity near those of striated musculature¹.

The next step is to release the gastric fundus for the preparation of fundoplication. With this:

- c. The remainder of the anatomical configuration of the esophagogastric transition is lost;
- d. There is doubt as to whether the region will have resistance to abdominal efforts due to intestinal constipation, urinary obstruction of prostatic origin, pregnancy, work that requires great physical effort or even athletic activities, frequently occurring nowadays;
- e. The use of synthetic or absorbable meshes may be useful in closing major hiatal defects, but their indiscriminate use, owing to a lack of evidence of benefit and the risk of visceral injury, is far from consecrated.

The gastric fundus surrounds the distal esophagus at about 3 to 4 cm in extension and is fixed with the application of three stitches on average.

- f. We are establishing an atypical suture, between the gastric serosa and esophageal

muscular layer, the healing of which has never been specifically studied, and it is sufficient for the studies to demonstrate competence of the fundoplication in the containment of reflux².

It is not difficult for a breakdown of the fundoplication to occur surgically at any time when one has, for example, the operation performed inadvertently in case of achalasia. Then, it is concluded that the scar is not endowed with great resistance and that:

- g. The weight of the intake is a risk factor for its dehiscence.

Other events can not be disregarded. Intuitively the various surgeons establish a progressively consistent diet during 30 to 60 days postoperatively, much more with respect to transient dysphagia, which results from esophageal denervation during the release of the organ. So:

- h. More fearful patients set a more cautious rhythm in returning to free food. Others are much more daring;
- i. Acute gastric distension associated with dense foods and alcoholic drinks, implying pyloric dysfunction, potentially constitutes a significant risk of fundoplication dehiscence;
- j. That dysphagia to solids from the immediate postoperative period sometimes perpetuates itself, which leads the patient to accompany their meals with fizzy drinks, which promote better food passage, but also entail considerable gastric distension.

The great concern of the surgeon is the vomit from the anesthetic recovery, that can destroy the whole procedure, and ondansetron has been a solitary defender of all, at least immediately, but

- k. What about vomiting in the days or weeks that follow?
- l. In fact, vomiting, or even eructation, are not possible when an efficient antireflux surgical mechanism is instituted. A considerable possibility of adversely affecting the esophagogastric transition occurs when the food and / or alcoholic excess cause a relevant malaise, followed by an immense retrograde gastric emptying effort, transmitted to the hiatus and to the fundoplication.

It is unknown how much, and for how long, additional sutures attaching the fundoplication to the diaphragm and / or the stomach to the abdominal wall could increase the degree of protection, since such atypical sutures have never undergone a specific study of resistance or durability.

Studies that ascribe short term effects to antireflux operations may be related to the progressive functional loss of the procedure, but much more significant is the current emergence of significant numbers of patients with hiatal hernia following surgical treatment of GERD, most of them with some impairment of the hiatoplasty and with some degree of

fundoplication dehiscence.

In general, the pyrosis gives prominence to symptomatic dysphagia and epigastric discomfort arising from esophagogastric anatomical deconfiguration. There is a NEW DISEASE, with mixed characteristics between esophageal obstruction and gastroesophageal incontinence, usually imposing a more complex surgical treatment than previously established, which leads to the conclusion that a great deal must be discussed with the patient before proposing a surgical procedure in cases of GERD:

- 1) It is better to exhaust the clinical resources before it is considered intractable;
- 2) The operation is essential only in the case of undeniable complications or relevant anatomical deformities;
- 3) The indication for surgery should be very selective for the sake of convenience and freedom of the diet;

It should be considered that after surgery:

- 4) Lavish meals should be avoided;
- 5) Similarly, the intake of sparkling or fizzy drinks during meals should also be shunned;
- 6) Alcohol only with great restraint;
- 7) Normal bowel habits should be preserved, as should urination;
- 8) The surgery must only be performed on women after they have passed childbearing age;
- 9) A change of employment is mandatory for manual workers;
- 10) Athletic activities, only moderate ones.

Finally, in order to AVOID that the surgical treatment of GERD leads to the emergence of NEW DISEASE, the following strategy is mandatory:

- Carefully select the cases to be operated;
- Apply impeccable operative technique;
- Alert the patient that they will have been OPERATED ON (AND NOT NORMAL), of which specific care will be PERMANENTLY required following the procedure.

REFERENCES

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2. Felix VN. Fundogastropexy – The pentagastrin effect on the LES pressure in chagasic patients. ABCD Arq Bras Cir Dig 2:96, 1987.