Follow up in large bowel resections: Wernicke-Korsakoff's syndrome

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*Introduction.* The main complication of large bowel resection is the malabsorption syndrome, a rare form of which is the syndrome of Wernicke-Korsakoff. *Patients and Methods.* B.E. following gastro-entero anastomosis develops Syndrome Wernicke-Korsakoff characterized by progressive state of disorientation, fixity of gaze, dysphoria. *Results.* Syndrome Wernicke-Korsacoff is linked to a deficiency of thiamin (also known as vitamin B1). *Conclusions.* In the follow up of patients who underwent a large bowel resection will be important to carry out systematic blood tests that can detect any frameworks-megaloblastic anemia macrocytosis deficiency vit. B12, iron deficiency, hypomagnesaemia, hypocalcemia, ipodisprotidemy. In the follow up of patients that can detect any frameworks-megaloblastic anemia macrocytosis deficiency vit. B12, iron deficiency.

Key words: Wernicke-Korsacoff's syndrome, malabsorption.

#### INTRODUCTION

The main complication of large bowel resection is the malabsorption syndrome, a rare form of which is the syndrome of Wernicke-KORSAKOFF (1). The massive intestinal infarction, the Crohn's disease, the actinic enteritis, abdominal trauma, the volvulus, the intussusception, cancer, or necrotizing enterocolitis in the pediatric surgery of ileum athresia, meconium ileus, volvulus, the on common mesentery, forcing the surgeon to perform interventions that reduce the intestinal tract to about a meter and a half, resulting in a framework of Short Gut Syndrome (2), characterized by malabsorption, weight loss, asthenia, ipovitaminosis, diarrhea and reduced acid electrolyte (K, Na, Mg serum). The appearance of this syndrome has been associated with several factors, which individually can not be the absolute determinant.

These factors are:

• the extent of resection (usually more than 50% of the small intestine)

• the location (eg fasting rather than ileum)

• the presence or not of the ileum-caecal valve surgery after demolition

• the degree of liver function, pancreatic and intestinal tract of the residue

• adaptability residual intestine

• the primary pathology favorente syndrome and any residual disease.

Experience has shown that resections limited to 30-60 cm of the small intestine are not usually accompanied by significant alterations of the processes of absorption (with the exception of a transient condition that disappears diarrhea a few weeks after surgery). Exeresi affecting 60-75% of the light but leave intact the last 50-60 cm of ileum and the ostium ileocecale, are often well tolerated despite a modest steatorrea. By contrast, the ileum resections and ostium ileocecale which have a range of 80-90 cm, driving under severe malabsorption (3).

#### **PATIENTS AND METHODS**

B. E. undergoes emergency surgery for gastro-entero anastomsi on ansa ileale in a neoplastic infiltration of the duodenum secondary to gallbladder of FTE (intraoperaoria histological diagnosis). The result is a malabsorption syndrome characterized by progressive state of disorientation, fixity of gaze, dysphoria, to perform MRI showing the presence of brain areas ialine refers primarily to senile degeneration, but with differential diagnosis of thiamine deficiency syndrome. In agreement with the Neuro-ophthalmologists in the suspicion of a syndrome of Wernicke-KORSAKOFF you start therapy with 200 mg / day i.m. the complex of the vitamin B group with slow and gradual recovery of cognitive functions of the patient in the twentieth day post-surgery was

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discharged with home therapy.

In the second half of May 2007 the new shelter at our Institute for pejorative jaundice refers to the known metastatic disease, it is decided ultrasonography guided procedure for placement of a stent for biliary drainage, with gradual regression of the jaundice.

During the period of hospitalization is made supportive care with antibiotics, vitamin complexes and physiotherapy, functional rehabilitation for motor and respiratory regular cognitive function.

### RESULTS

The clinical immediate and late following a bowel resection is characterized by physiological and the means of compensation. The large intestine after extensive resections of the small intestine, may have to receive Chimo acid concentration and chemical composition is not usual, resulting in alteration of bacterial flora. Syndrome Wernicke-Korsacoff is linked to a deficiency of thiamin (also known as vitamin B1), this deficiency is rarely reflected in the civilized nations, appearing only in the ethyl alcohol in individuals with severe imbalances in diet or special medical conditions such as dialysis Peritoneal chronic hemodialysis, the treatment for the supply again after prolonged fasting after abdominal surgery broadly demolition. In Polyneuropathies minor are administered 10-20 mg / day of thiamine in divided doses, for 2 weeks., Followed by a proper diet. In moderate or advanced neuropathy, the dose of 20-30 mg / day should be administered for several weeks after the disappearance of symptoms.

## **CONCLUSIONS**

In the follow up of patients who underwent a large bowel resection will be important to carry out systematic blood tests that can detect any frameworksmegaloblastic macrocytosis anemia (4) deficiency of vit. B12, iron deficiency, hypomagnesemia, hypocalcemia, ipodisprotidemy in order to promptly correct any deficiency. You should correct any imbalances especially in the acute phase through post-operative intravenous infusions of saline solutions, integration parenteral caloric, vitamin, hidroelettrolitic; is also appropriate to associate as soon as oral or enteral nutrition (albeit low-fat and low osmolarity) in order to stimulate the regenerative processes of compensation of the residual intestinal mucosa.

The clinical immediate and late following a bowel resection is characterized by physiological and the means of compensation (5).

The large intestine after extensive resections of the small intestine, may have to receive Chimo acid concentration and chemical composition is not usual, resulting in alteration of bacterial flora. Moreover, the conspicuous loss of feces diarrhea acidic, high in the intestinal enzymes are not inactivated, determines the appearance of anal rhagades and a chronic inflammation of the perianal skin. We can distinguish three phases (6):

### - THE POST-OPERATING

It's characterized by episodes of diarrhea considerable gravity, hyperkinesia with increased intestinal transit, gastric hypersecretion, nausea and rapid weight loss, are often present oedemas by protein depletion, but the constant electrolyte balance disorders.

## - STAGE ADAPTATION

Appear after 20-30 days and a period of 1-3 months. Diarrhea decreases for both quantity and frequency, and undermining the idroelet-trolitico tends to fall in the standard, there is a slowdown in weight loss. E 'in this period that you introduce changes vicarianti to compensate for the decreased absorption of nutrients.

It assists with dimensional residual intestine in length and caliber, epithelial-hyperplasy of intestinal cells with increased size and hypertrophic villous arborization, increasing turn-over of intestinal cells with a growth in depth of crypts, colon residue intestinalization which is to absorb water, carbohydrates, amino acids and electrolytes.

The adaptation seems to be regulated by a feedback mechanism modulated by intrinsic and extrinsic factors. Among them, food and bilio-pancreatic secretions play an important role.

In this second phase are usually the most serious avitaminosis, anemia-megaloblastic macrocytosis deficiency of vit. B12 and calcium-magnesium deficiency that can lead to tetany crisis.

## - PHASE BALANCE

Takes place over a period of 6-24 months after surgery. It has a gradual transition to a virtually normal. Characteristic of this period may be clinical conditions such as peptic ulcers, osteoporosis, nephrolithiasis, the cholelithiasis.

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