

Primary conservative treatment of intestinal occlusion syndrome



Healthcare

Key words : Intestinal occlusion syndrome, evacuating enema, conservative treatment, hydroelectrolytic reanimation, phytobezoar

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Abstract

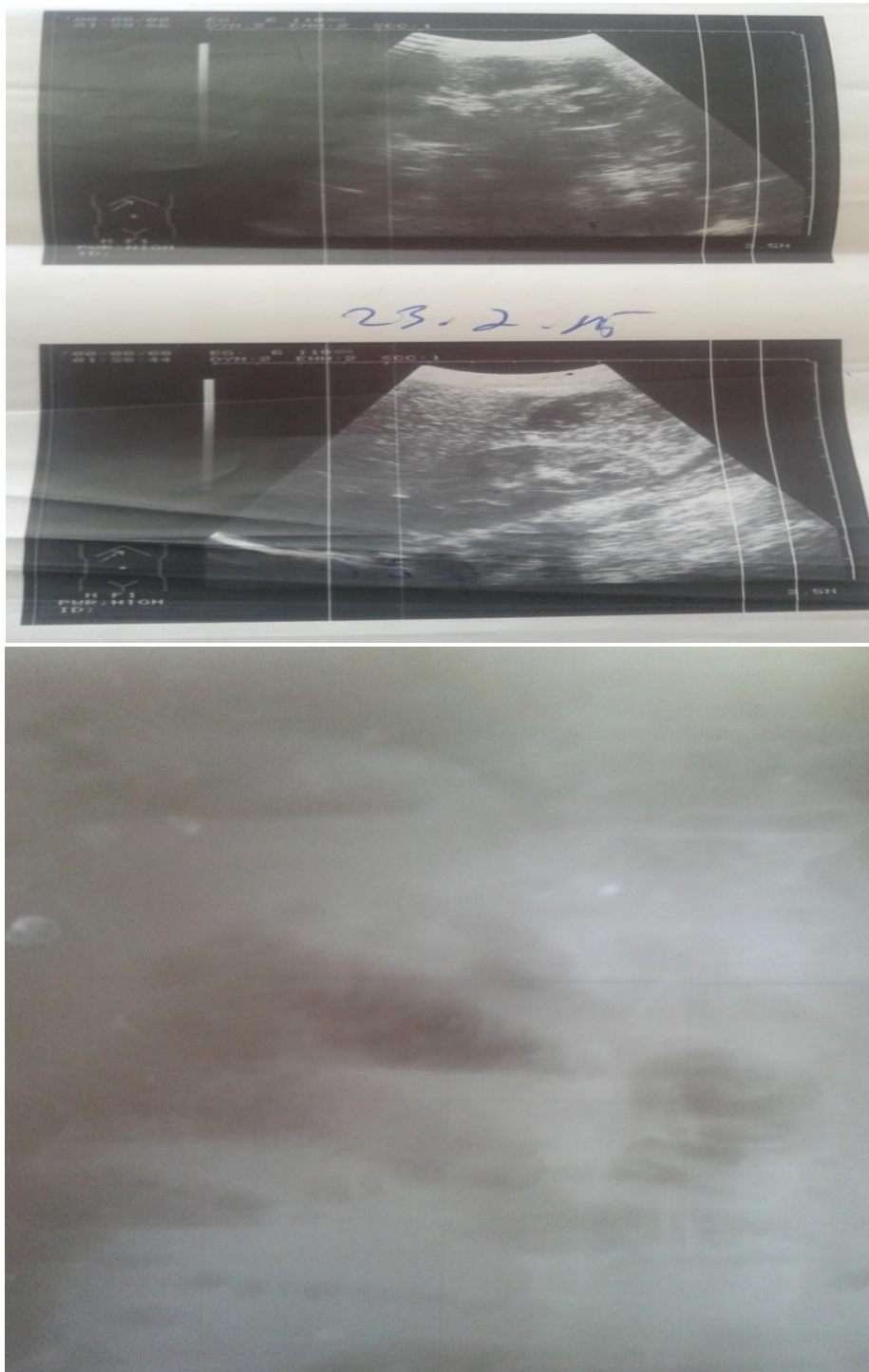
This modest study refers to an analytical research work of 10 years carried out from 2000 to 2010, where 60 patients affected by the intestinal occlusion syndrome have been examined, have undergone hydroelectrolytic balance, nasal-gastric tubing, evacuation of the colon, and, in some cases, they have gone through eventual restoration of the abdominal hernia, when such pathologies existed. Consequently, the clinical aspect of such syndrome has been removed, the transition re-established, the radiological exam significantly improved and the patient skipped the surgical intervention.

In the emergency room or the surgery ward the diagnosis of intestinal occlusion syndrome is allegedly considered as an acute intestinal occlusion and this is due to the common belief that any acute intestinal occlusion should have intestinal resolution. But where shall we set a limit? What clinics or clinical aspects should we consider as referring to an acute intestinal occlusion, and in how many cases the surgical intervention is the best solution to this nosology? Is there any alternative and less-invasive treatment to this nosology? Shall we give a pre-operation time to this nosology by making the so-called “pre-surgical” efforts, or as we commonly refer them to as “conservative” ones? What is the outcome of this 10-years study and of the 5-years analysis following this study?

As we have already shown in our 10-years study papers, special care is taken of such cases when the patients affected by intestinal occlusion syndrome have never undergone any surgical operation, i.e, they have no prior abdominal incision. Such patients have spent more time in conservative treatment, and the result is that 15% of the patients (who had been under reanimation treatment with repeated evacuations of the colon, and if they had no anamnesis or indication for any organic pathology of the intestinal tract) needed no surgical intervention on this occlusion syndrome. Such surgical maneuvers have been effective either for 0-14 or for 65 and above year old patients. We have employed the same method to resolve cases of phytobezoar or other disorders of intestinal transit, especially in elderly patients affected by serious diseases of the cardiopulmonary or nervous system (cerebral vascular accidents).

The Following Photos Show Abdominal Roentgenography and Echography at Hydro-Air Levels





The Last Photo Shows Hydro-Air Levels Almost Extinguished

In evident diagnoses such as incarcerated hernia, delayed invaginations, confirmed occlusion tumors, the conservative resolution was an option, even though such maneuvers as hydroelectrolytic reanimation, evacuation enemas or sometimes colonoscopy insufflation have been undertaken.

In all cases of intestinal occlusion syndrome we have tried to implement a so-called “peaceful” solution, mainly in the new invaginations (where anamnesis shows recent display of the disease), in the so-called unrecoverable hernias, or even in such tumors where the general conditions has allowed for a later and more

tranquil treatment, following the initial display as acute intestinal occlusions; furthermore, in the first, post-operation days of occlusions we have been significantly prudent and conservative by employing nasal-gastric tubing, hydroelectrolytic regulation, cecum evacuation and other maneuvers.

STATISTIC ANALYSIS OF INTESTINAL OCCLUSION (10-YEARS STUDY)

Type of study: prospective cohort study

Sample: a population of 400 patients hospitalized with the Regional Hospital of Vlora for the diagnosis of “*Intestinal occlusion*”, who have undergone “Emergent” or “Scheduled” surgical interventions, and of whom, 125 patients have been classified under the category of “*non-optimal (good) clinical outcome*”, whereas 275 patients have been classified under the category of “*optimal (very good) clinical outcome*”.

Definition of two subcategories of the population under examination:

Exposed: Individuals affected by intestinal occlusion, who have undergone “emergent” intervention with the Regional Hospital of Vlora: 300 individuals

Non-exposed: Individuals affected by intestinal occlusion, who have undergone “scheduled” intervention with the Regional Hospital of Vlora: 100 individuals

Goal: Evaluating the incidence in both exposure subcategories with regard to the non-optimal clinical outcome.

Exposure	Good clinical outcome (non-optimal)	Very good clinical outcome (optimal)	Total
Emergent intervention (E+)	104	196	300
Scheduled intervention (E-)	21	79	100
Total	125	275	400

1. RR (Relative Risk) = 1.6 95% CI(1.1 – 2.5) P<0.05 (0.016)
2. AR (Risk Difference) – Risk attributable to the exposure = 0.34 (I_{exp+}) – 0.21 (I_{exp+}) = 0.13 = 13/100
3. AR% (Percentage of Attributable Risk) = $(AR/I_{exp+}) \times 100 = 37.5\%$
4. PAR (Population Attributable Risk) = $I_{pop} - I_{exp+} = 0.3 - 0.21 = 0.09 = 9\%$
5. PAR% (Percentage of Population Attributable Risk) = $(PAR/I_{pop}) \times 100 = 29\%$

Conclusions

1. In patients affected by intestinal occlusion undergoing an *emergent intervention* the risk to have a “non-optimal” clinical outcome is 1.6 times higher than in patients undergoing a *scheduled intervention*.
2. If all patients affected by intestinal occlusion undergoing an *emergent intervention* submitted themselves to scheduled interventions, then the risk of a “non-optimal” clinical outcome would reduce by 13 per 100 (AR per 100) individuals, or by 37.5% (AR%) of the incidence to have a “non-optimal” clinical outcome.
3. By all individuals undergoing a surgical intervention for intestinal occlusion is expected a reduction by 9 per 100 (PAR per 100) if all of them undergo a scheduled intervention. This reduction represents a decline by 29% (PAR%) of the incidence in the population of individuals with intestinal occlusion.

Indeed the results have been quite good compared to those mentioned by other foreign scholars (from Italy or other countries). This 10-years study (2000-2010) does not include patients who have recovered following the implementation of such procedures; in fact, such patients are viewed as affected by an intestinal alimentary load or phitobezoar with sub-occlusion phenomena, and treated by the conservative method for 12-48

hours. We have considered this nosology as part of the intestinal occlusion syndrome independently of where (surgery, pathology ward or other hospital services) the patient had been hospitalized.

In a final analysis to this nosology, we believe that intestinal occlusion is a clinical syndrome that should be evaluated, reanimated, examined and treated as adequately as possible to result minor consequences for the patient and a reasonable cost-efficiency ratio for the hospital.

This is a statistic analysis of a 10-years study on the intestinal occlusion syndrome; however, it would be fair that to this final table were attached event 60 other cases or 15% of the number of patients affected by intestinal occlusion syndrome, who have recovered by non-surgical methods. In this way, the final analysis would have more positive figures of the final results.

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