

Ogilvie Syndrome and Current Treatment Methods

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Ogilvie syndrome (OS) was first described by Sir Heneage Ogilvie in 1948; without mechanical obstruction; It is a disease defined by acute colonic dilatation. Although it is seen in female and young people, it is a condition that is more common in adult male [1]. The pathogenesis of Ogilvie syndrome is unclear. There is an imbalance between the parasympathetic nerves that often innervate the colon and the sympathetic nerves. In Ogilvie syndrome, there may be autonomic imbalance caused by increased sympathetic nerve function or disruption in parasympathetic nerve functions. Also surgical interventions may cause sacral parasympathetic nerve dysfunction that innervate the rectum and left colon [2-4].

Other etiopathogenic factors:

- **Systemically:** Metabolic diseases, electrolyte imbalance, chronic alcoholism, opioid drugs, infection/sepsis, pregnancy and birth, advanced age, malignancy, thyroid function disorders.
- **Cardiovascular diseases:** Myocardial infarction, heart failure, pulmonary vascular diseases.
- **Neurological diseases:** Parkinson's disease, dementia, multiple sclerosis, spinal cord diseases, brain tumors, meningitis.
- **Post-operative conditions:** Caesarean section, spinal cord operation, orthopedic surgery, intra-abdominal surgery, pelvic surgery.
- **Traumatic events:** Intra or extra-abdominal trauma, burns.
- **Abdominal Infections:** Acute pancreatitis, acute cholecystitis.

Clinically, abdominal pain, nausea, vomiting, malnutrition, abdominal distension and related respiratory distress are important findings of the disease [5]. Although an obstructive lesion or a different condition (bride, etc.) is not detected in abdominal imaging (abdominal x-ray, computed tomography) due to abdominal pain, Ogilvie Syndrome should be considered in the case of colonic dilatation appearance. Ogilvie Syndrome is an important cause of morbidity and mortality. Mortality rate is estimated to be 40% when colonic ischemia and perforation occur, especially as a result of dilatation-related blood supply disorder [6].

As a treatment, eliminate the factors that trigger the present of ileus is important (opioid intake, electrolyte imbalance, anticholinergic use). After, bowel rest and intravenous fluid hydration is made by conservative treatment. It is important to measure the abdominal diameter and follow-up of gas/stool output. Rectal examination performed at intervals to induce gas discharge in the patient, nasogastric tube and rectal tube to be applied to the patient also have compression-reducing activity [7]. Post-treatment success is achieved in 83 - 96% of the cases [8]. Neostigmine should be added to the treatment in patients who do not improve with a conservative approach [9].

Neostigmine is a reversible acetylcholine esterase inhibitor that stimulates muscarinic receptors and increases motor activity in the colon. Secondary dose of neostigmine can be applied if the desired efficacy does not occur in the patient or there is a recurrence. However, in case of ongoing obstruction, more aggressive decompression procedures are required. Therefore, colonoscopic decompression treatment can be applied to the patient, considering the risk of perforation. When colonoscopic decompression is inconclusive or in cases where this procedure cannot be performed, the patient should be surgically intervened. For this reason, in laparotomies, a proximal segment colostomy or cecostomy tube can be performed on the patient to relieve the dilated colon segment [10].

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