

Visceroptosis: Some Typological Features of Its Course

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Abstract The authors report that visceroptosis is complicated by chronic colostasis in 30-40% of cases and is one of the most common diseases among the working-age population. Visceroptosis can manifest in various clinical forms. The prevalence rate is unknown, as only 10-20% of cases present with clinical symptoms. The authors conclude that considering typological features in visceroptosis combined with chronic colostasis can help optimize surgical tactics, leading to improved treatment outcomes.

Keywords Visceroptosis, Chronic colostasis, Typological features, Large intestine

1. Introduction

Visceroptosis has several synonyms (enteroptosis, splanchnoptosis, Glenard's syndrome; from Greek σπλάγχνα – internal organs and πῶσις – prolapse). This is a collective term referring not just to a simple mechanical descent of internal organs but to such a displacement or excessive mobility that results in subjective painful sensations and objective functional impairments in these organs [2,6].

According to various researchers, visceroptosis is complicated by chronic colostasis in 30–40% of cases and is one of the most common conditions among the working-age population [5]. Visceroptosis can manifest in different clinical forms. The incidence rate is unknown, as the disease presents clinical symptoms in only 10–20% of cases. In most instances, visceroptosis is diagnosed during examinations for other symptoms [1]. Physiological prerequisites for the development of visceroptosis include individual constitutional factors, underdevelopment of the ligamentous apparatus, and incomplete fixation of the colon to the posterior parietal peritoneum [4].

The aim of the study was to determine some typological features of the clinical course of visceroptosis.

2. Material and Methods of the Study

The subject of this study comprised 132 patients with visceroptosis in combination with chronic colostasis (CC), who were undergoing inpatient treatment in the coloproctology department of the Department of Surgery and Civil Defense at the Clinic of Andijan State Medical Institute.

In the clinical analysis of the studied patients, we adhered to the age classification adopted by the WHO [3].

Inclusion criteria for the study: 1. age over 18 years; 2. verified diagnosis of visceroptosis in combination with colostasis (CC); 3. elective nature of the pathology; 4. absence of acute infectious and inflammatory diseases; 5. written consent from the patient and their relatives for examination and treatment.

Exclusion criteria from the study: 1. combination of visceroptosis with nephroptosis or hepatoptosis; 2. urgent intestinal diseases; 3. acute cerebrovascular accidents and myocardial infarction; 4. acute infectious and viral pathology; 5. colonic tumors; 6. refusal of surgical treatment; 7. inability for further follow-up; 8. comorbid conditions in the stage of decompensation. According to the study's objectives and tasks, the patients were conditionally divided into two groups:

- **comparison group** (2018–2022) – 85 patients (64.4%), who underwent a retrospective analysis of surgical treatment outcomes following traditional approaches.
- **main group** (2020–2023) – 47 patients (35.6%), who underwent a prospective study of surgical treatment using an optimized surgical strategy.

To achieve the study's objectives, clinical-laboratory, instrumental, and statistical research methods were conducted in accordance with the latest standard techniques, following the examination guidelines approved by the Ministry of Health of the Republic of Uzbekistan. All patients were hospitalized, examined, and operated on in a planned manner. Special attention was given to the examination of all sections of the large intestine, which helped clarify topographic data regarding the condition of the intestines.

3. Results and Discussion

The uniformity of the primary surgical pathology, equal conditions for providing specialized care, similarity

in comorbidities and their frequency, as well as the nature of surgical interventions, allowed for the presentation of quantitative characteristics in a combined manner.

An analysis of gender distribution among patients with visceroptosis combined with chronic colostasis under elective surgical conditions showed that men accounted for 28 cases (23.3%), while women constituted 104 cases (78.8%). The conducted analysis revealed that visceroptosis combined with chronic colostasis is predominantly diagnosed in females, with an average ratio of 3.7:1. This observation warranted a more detailed examination of this trend.

Visceroptosis combined with chronic colostasis was most frequently diagnosed in the 45–59 age group—67 cases (50.8%), representing the most active segment of the working population, who are more exposed to external factors. Among patients aged 18–44 years, 37 cases (28.0%) were identified, largely associated with congenital developmental anomalies. Patients aged 60 and older accounted for 28 cases (21.2%), which may indicate prolonged conservative treatment before surgical intervention. In cases of visceroptosis combined with chronic colostasis, surgical intervention was performed in 42 patients (31.8%) with a disease duration of 1–5 years, including 37 women (28.9%) and 5 men (3.8%). The disease duration of 6–10 years was observed in 64 patients (48.5%), comprising 47 women (35.6%) and 17 men (12.9%). Of particular concern were patients with a disease duration of over 10 years, accounting for 26 cases (19.7%), including 20 women (15.2%) and 6 men (4.5%). To clarify the causes of visceroptosis, the body type (constitution) of the studied patients was examined. It is important to note that visceroptosis was most frequently diagnosed in individuals with an asthenic body type—84 cases (63.6%), of which 16 cases (12.1%) were men and 68 cases (51.5%) were women. Among patients with a normosthenic body type, the condition was identified in 43 cases (32.6%), including 8 men (6.1%) and 35 women (26.5%). In individuals with a hypersthenic body type, the disease was diagnosed in only 5 cases (3.8%), with 4 men (3.0%) and 1 woman (0.8%).

The clinical symptom complex in visceroptosis combined with chronic colostasis consisted of general and local symptoms. Constipation, as the primary manifestation of visceroptosis, was observed in 110 patients (83.3%), while alternating constipation and diarrhea were noted in 22 patients (16.7%). A feeling of heaviness in the abdomen was reported by 102 patients (77.3%), intestinal bloating by 89 patients (67.4%), and varying degrees of pain by 127 patients (96.2%). Abdominal sagging and striae were observed in 25 patients

(18.9%), diastasis of the anterior abdominal wall muscles in 9 patients (6.8%), and symptoms of intoxication (weakness, dizziness, nervousness) in 129 patients (97.7%).

In cases of visceroptosis combined with chronic colostasis, we analyzed the degree of colonic obstruction, as excessively prolonged conservative treatment exacerbates the condition, affecting patients' quality of life (Table 1).

Table 1. Clinical Assessment of the Degree of Colonic Obstruction

Degree of Colonic Obstruction:	abs	%
Compensation (constipation less than 3-4 days)	26	19,7
Subcompensation (constipation 5-10 days)	61	46,2
Decompensation (constipation more than 10 days)	45	34,1
Total:	132	100

As seen in Table 1, the compensation stage of visceroptosis (constipation less than 3–4 days) was identified in 26 cases (19.7%). The subcompensation stage (constipation for 5–10 days) was observed in 61 cases (46.2%), while the decompensation stage (constipation for more than 10 days) was found in 45 cases (34.1%). Clarifying the degree of colonic obstruction in visceroptosis influenced the determination of the scope and timing of surgical intervention. In cases of visceroptosis combined with chronic colostasis, the extent of bowel descent and deformation was assessed to determine the surgical intervention volume, with the final decision being made during the procedure.

As seen in Table 2, among the types of visceroptosis, the smallest group consisted of patients with transverse ptosis with deformation of the right flexure of the colon, which was identified in 13 (9.8%) cases. Among them, the compensated stage was noted in 4 (3.0%) patients, the subcompensated stage in 6 (4.5%), and the decompensated stage in 3 (2.3%). The largest group consisted of patients with transverse ptosis with deformation of the left flexure of the colon, which was identified in 90 (65.3%) cases. Among them, the compensated stage was noted in 22 (16.7%) patients, the subcompensated stage in 38 (28.8%), and the decompensated stage in 30 (22.7%). Meanwhile, transverse ptosis with deformation of both flexures of the colon was identified in 29 (22.0%) cases. Among them, the subcompensated stage was noted in 17 (12.9%) cases, and the decompensated stage in 12 (9.1%) cases. Although the obtained data are undoubtedly important, they are based solely on a qualitative assessment of radiographs and do not allow for predicting the further clinical course of colonic passage disorders due to subjectivity, which ultimately complicates the development of surgical tactics.

Table 2. Degree of Anatomical Changes (Descent, Displacement) of the Colon

Degree of Anatomical Changes in the Colon	Body Type (Constitution) (n=132)							
	Compensated		Subcompensated		Decompensated		Total	
	aбс	%	aбс	%	aбс	%	aбс	%
Transversoptosis with deformation of the right flexure	4	3,0	6	4,5	3	2,3	13	9,8
Transversoptosis with deformation of the left flexure	22	16,7	38	28,8	30	22,7	90	65,3
Transversoptosis with deformation of both flexures	-	-	17	12,9	12	9,1	29	22,0
Total:	26	19,7	61	46,2	45	34,1	132	100

As is known, concomitant therapeutic conditions have a certain impact on determining surgical tactics and rehabilitation for the studied patients. Among the examined patients, cardiovascular diseases (IHD, hypertension, angina pectoris) were most frequently identified in 25 (18.9%) cases, hepatobiliary system diseases (type 2 diabetes mellitus, chronic cholecystitis) in 10 (7.6%), chronic obstructive pulmonary diseases (chronic bronchitis, pneumonia, bronchial asthma) in 8 (6.1%), and diseases of the genitourinary system (chronic pyelonephritis, cystitis) in 11 (8.3%) cases. The presence of severe concomitant therapeutic pathology posed additional challenges in determining surgical tactics and rehabilitation against the background of an initially severe condition. Patients with visceroptosis combined with chronic colostasis had previously undergone various surgical interventions in 58 (43.9%) cases. Of particular note is the relatively high frequency of cesarean section 25 (18.9%) cases as well as surgical interventions for large ventral hernias and diastasis of the anterior abdominal wall muscles in 13 (9.8%) cases. The conducted analysis indicates that multiple pregnancies (cesarean sections) and the presence of large ventral hernias with muscle diastasis play a certain role in the development and progression of visceroptosis. Additionally, the patients' history included cholecystectomy in 5 (3.8%) cases, appendectomy in 8 (6.1%) cases, and hysterectomy with extirpation in 7 (5.3%) cases.

4. Conclusions

The study identified certain typological features of visceroptosis, including a significant predominance of female patients, with a male-to-female ratio of 3.7:1, and a high incidence in middle age. Diagnosis at a young age indicates a developmental anomaly, whereas in older age, it suggests excessively prolonged conservative treatment, which exacerbates the condition. The clinical symptom complex consisted of general and local symptoms, with the primary manifestations

being constipation, alternating constipation and diarrhea, as well as dyspeptic symptoms and signs of intoxication.

The largest group of patients had transverse colon ptosis with deformation of the left colonic flexure 65.3% of cases. Transverse colon ptosis with deformation of both flexures was observed in 22.0%, and deformation of the right colonic flexure in 9.8% of cases. Comorbid therapeutic pathology was noted in 40.1% of cases, with cardiovascular diseases accounting for 18.9%. The analysis suggests that multiple pregnancies (cesarean section 18.9%) and large ventral hernias with diastasis of the abdominal muscles 9.8% play a role in the development and progression of visceroptosis. Thus, in cases of visceroptosis combined with chronic colostasis, considering typological features will help optimize surgical tactics, leading to improved treatment outcomes.

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