

# Right-sided diverticulitis: A single Western center experience

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## INTRODUCTION

While left sided colonic diverticular disease is common in Western countries, right sided colonic disease is rare (1-5%). The vast majority of published information are case reports and even fewer articles evaluating population outside of Asia where it is very common among young men (<50 years) and may be presented as acute appendicitis.

In our practice we found to have a high incidence of right sided diverticulitis. This pull of data of a Caucasian population can help enlighten the disease in a population outside of Asia.

## OBJECTIVES

To determine the incidence of right sided diverticulitis in patient presenting with colonic diverticulitis, as well as identify the symptoms, clinical features, treatment and outcomes in a single Western center

## METHOD

A descriptive retrospective analysis collecting from medical records database of all patient who were diagnosed with right sided diverticulitis at Meir Medical Center from January 2014 to December 2018

## RESULTS

A total of 977 patients with colonic diverticulitis were admitted to our institution, of which 88 had right-sided diverticulitis (88, 9%), higher than reported in the literature. There were slightly more women than men (45 vs. 41) with a **mean age of 49.2** (range 16-91). Cecum was the most frequent site (50, 58%). The majority of patients were Jewish (71, 82.6%). The main presenting symptom was acute onset of right sided abdominal pain. The diagnosis was made almost exclusively by CT scan, appearing as an inflammatory mass, but no free perforation was described. All patients were successfully treated non-operatively. All recovered without complications. Low frequency of recurrence during mean follow-up period of 4 years. Upon recovery, no malignancy was found on colonoscopy.

### Study's flowchart

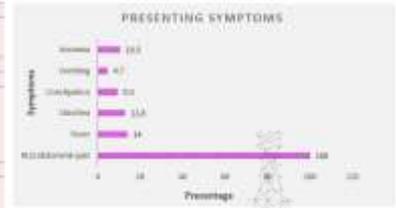


### Patients characteristics and diagnosis

	N	%
Sex		
M	41	41.3
F	47	52.8
Ethnicity		
Ashkenazi	31	34.9
Sephardi	5	5.7
Mizrahi	5	5.7
Other	1	1.1
CT	74	84.1
US	14	15.9
Presenting symptoms		
Acute abdominal pain	86	98.0
Abdominal distention	11	12.5
Diarrhea	11	12.5
Constipation	9	10.2
Abdominal tenderness	1	1.1
Fever	4	4.5
Nausea	9	10.2
Laboratory findings		
Abnormal WBC	49	55.4
Elevated CRP	45	51.1
Diagnosis		
Clinical	3	3.4
Pathologic	85	96.6
Pathologic	17	19.3
Diagnosis timing		
CT	3	3.4
CT following US	8	9.1
CT following US	4	4.5
Location of the disease		
Cecum	50	56.8
Right colon	23	26.1
Right transverse colon	1	1.1

### Treatment and outcomes

Treatment	N (%)	Median (min-max)
Conservative	88 (100)	
Surgery	0	
Antibiotic treatment (Days)	25 (2-40)	
Length of hospitalization (Days)	3 (2-7)	
Complications		
Abscess	1 (1.1)	
Perforation (Only covered perforation)	7 (8.1)	
obstruction	1 (1.1)	
Fistula	0 (0)	
Follow-up (years)	4 (2-6)	
Colonoscopy		
Normal	25 (28.3)	
Abnormal	10 (11.4)	
Not done	43 (48)	
Malignancy	0 (0)	
Recurrence		
First year	3 (3.4)	
After a year	1 (1.1)	
Mortality	0 (0)	



## CONCLUSIONS

Unlike sigmoid colon diverticulitis, the incidence of right-sided diverticulitis in Western Caucasian population is very low, as compared to the reported incidence in Asia. The clinical course is benign with conservative treatment without the need for surgery, with low complication and low recurrence rates