

BACKGROUND AND PURPOSE

Coronavirus Disease 2019 (COVID-19) primarily presents with fever and respiratory symptoms, however gastrointestinal manifestations are increasingly being recognized as part of the disease spectrum.

Reports exist of first-time acute diverticulitis during COVID-19. In our study, aimed to further characterize this association and its disease course.

METHODS

Patient identification

- Patients (n= 41, age 62.7 ± 15.5 years, 46% male) diagnosed with COVID-19 and subsequently acute diverticulitis within 30 days (Jan 2020 - Dec 2021)
- Diagnosis confirmed by RT-PCR and CT respectively

Exclusion criteria

- Prior history diverticulitis and/or COVID-19 infection

Data collection

- Patient characteristics and comorbid conditions
- COVID-19 disease course (therapy, treatment setting, medical/ventilatory therapy)
- Acute diverticulitis disease course (treatment setting, medical/surgical therapy, complications)

RESULTS

COVID-19 specific data:

- 23/41 (56%) of patients were hospitalized for COVID-19 (13.6 ± 10.7 days), of which 43% required BiPAP and 17% required intubation.
- Most common therapy was remdesivir (51%), dexamethasone (51%), and tocilizumab (5%)

Acute Diverticulitis specific data:

- 14.3 ± 9.6 days between COVID-19 diagnosis and acute diverticulitis
- In hospitalized COVID-19 patients, most (70%) developed acute diverticulitis during index hospitalization
- Complication incidence was comparable between hospitalized and non-hospitalized patients (65.2% vs. 66.7%)
- Patients hospitalized for COVID-19 had a higher incidence of the more severe complications; intestinal perforation (47.8% vs. 38.9%) and peritonitis (30.4% vs. 5.6%)
- Emergent surgical intervention was required in 24.4% of patients – incidence was higher in COVID-19 hospitalized patients (30.4% vs. 16.7%)

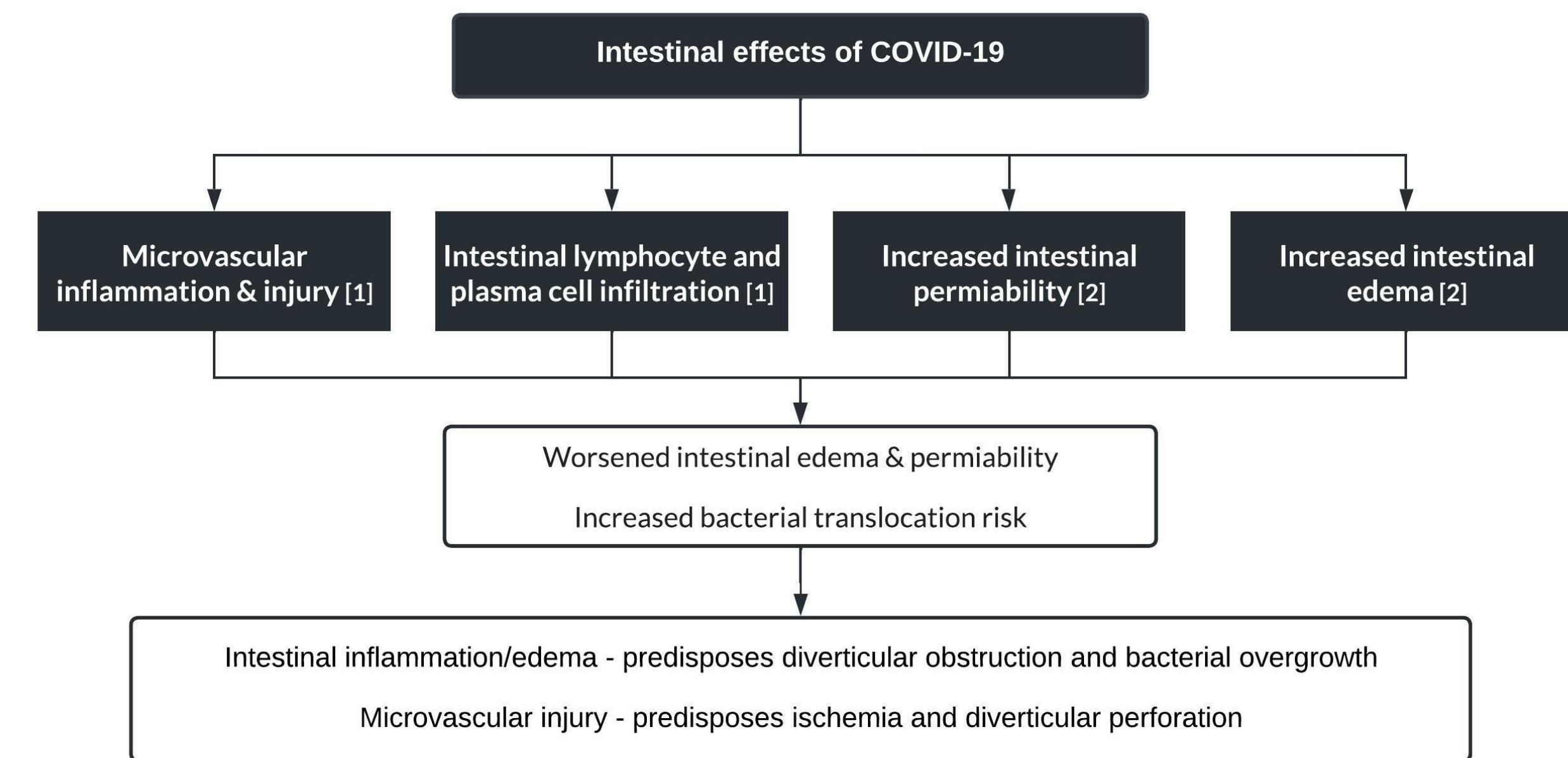
Diverticular complication	Overall incidence (n= 41)	Complication incidence subclassified by COVID-19 hospitalization status	
		Hospitalized for COVID-19 (n= 23)	Not hospitalized for COVID-19 (n= 18)
All cause complication incidence	65.9%	65.2%	66.7%
Abscess formation	36.6%	34.8%	38.9%
Intestinal perforation	43.9%	47.8%	38.9%
Peritonitis	19.5%	30.4%	5.6%
Fistula formation	4.9%	4.3%	5.6%

CONCLUSION

Our study indicates that patients diagnosed with acute diverticulitis within 30-days of COVID-19 infection have a high complication rate, most commonly intestinal perforation, abscess formation, and peritonitis.

Patients hospitalized for COVID-19 had more severe complications, particularly intestinal perforation and peritonitis. Diverticulitis occurred mostly during, rather than after, hospitalization.

Given high complication rate and increased severity, patients with COVID-19 who develop diverticulitis may benefit from increased clinician vigilance and monitoring.



REFERENCES

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