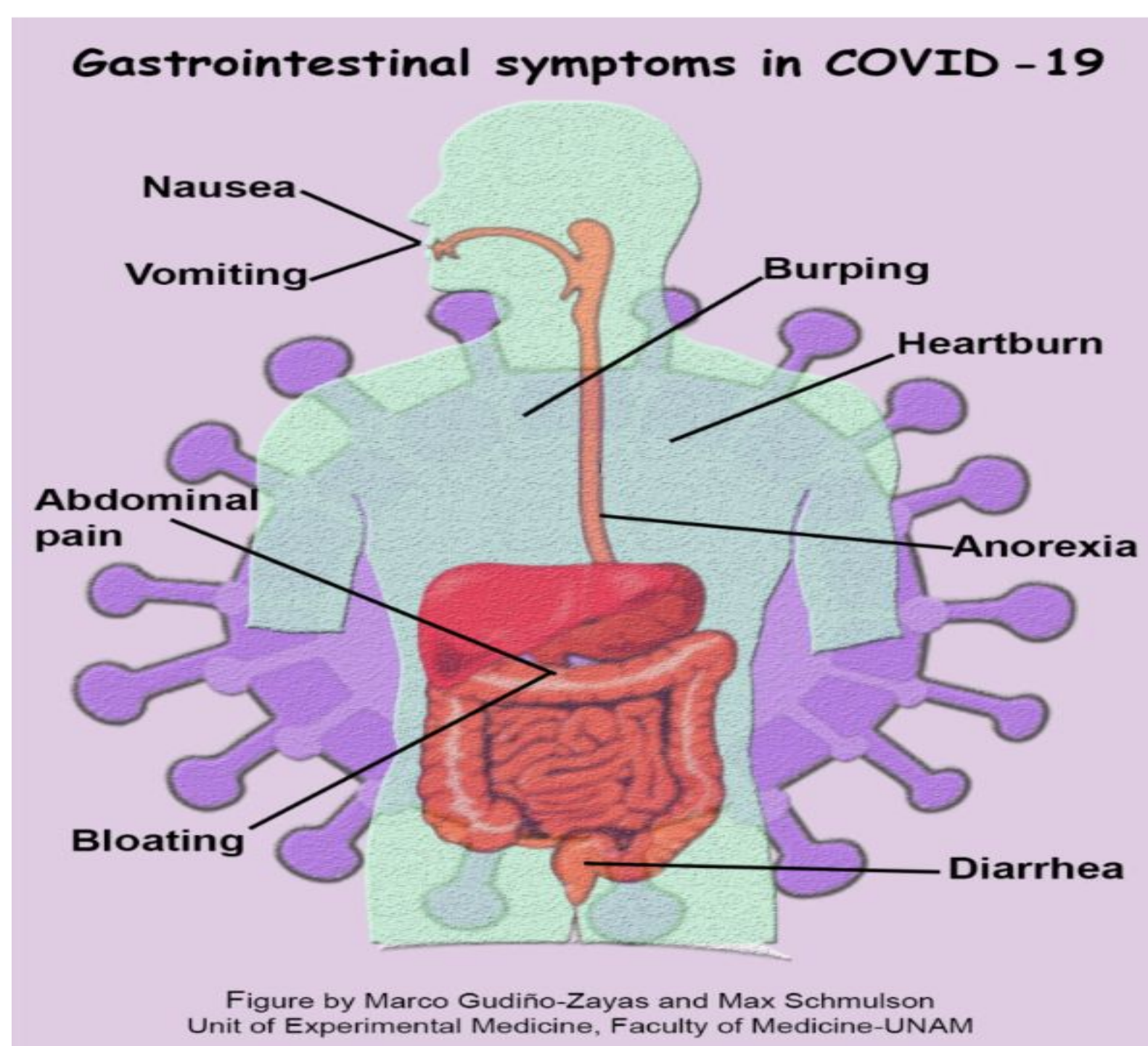


Background

- Post-viral gastrointestinal symptoms are well recognized.
- Over 50% of patients hospitalized with Covid-19 experienced at least one GI symptom.
- As SARS-CoV-2 binds to ACE-2 receptors located along the GI tract, and viral RNA is shed into feces, it is also possible that the infection can impact GI tract motility and/or gut flora leading to prolonged symptoms after the resolution of respiratory symptoms.



Methods

- A retrospective chart review was completed on all patients referred to Northwestern's post-covid GI clinic from November 2020–June 2021.
- For each patient, the following data was obtained: age, sex, hospitalization/ICU stays during their covid infection, psychiatric comorbidities, and GI history/medications.
- GI clinic notes were reviewed to determine primary post-Covid GI complaints.

Results

45 patients referred to post-Covid GI clinic

6 missed appointments
39 patients total in study

Average Age: 42 years
29 Females
10 Males
5 Hospitalized
3 ICU

Symptoms	Incidence (n=39)
Change in bowel habits	85% ➤ 8/33: constipation ➤ 9/33: diarrhea ➤ 6/33: mixed
Abdominal pain	69%
Nausea	51%
GE reflux	38%
Loss of appetite	31%
Blood in stool	15%

Results

Comorbidities

51% anxiety or depression

62% GERD or IBS

74% prior GI medication
(most commonly PPI or H2 blocker)

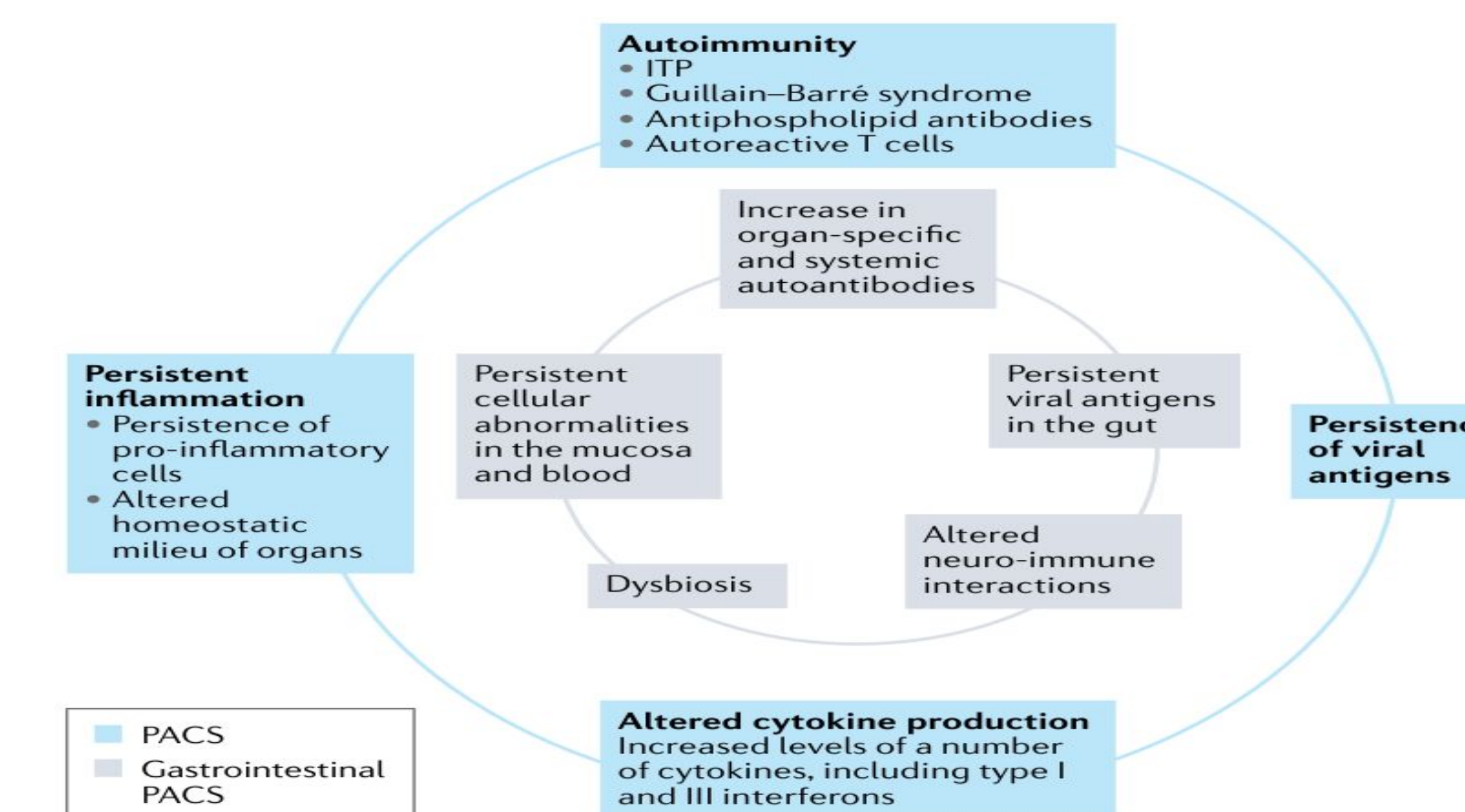


Fig. 1 | The pathophysiology of PACS and gastrointestinal PACS. The external blue circle represents proposed pathophysiological mechanisms in post-acute COVID-19 syndrome (PACS). The internal grey circle represents gastrointestinal-PACS-specific pathophysiological mechanisms. ITP, idiopathic thrombocytopenic purpura.

Conclusions

- Majority of patients seen in the post-Covid GI clinic reported a change in bowel habits (primarily diarrhea).
- A large percentage of patients were noted to have concomitant psychiatric comorbidities of anxiety/depression.
- As with other GI tract diseases (e.g. IBS, IBD), it is not unexpected that pre-existing psychiatric comorbidities contribute to heightened GI sensitivity or reporting of GI symptoms.

References

- Meringer, H. & Mehandru, S. Gastrointestinal post-acute COVID-19 syndrome. *Nat. Rev. Gastroenterol. Hepatol.* **19**, 345–346 (2022).