

# Efficacy of pre-test questionnaires and PCR on COVID-19 detection prior to motility examinations

Corona Virus Disease 2019 (COVID-19) pandemic has forced important restructuring in healthcare attendance in practically all over the world. Responsible virus of COVID-19 disease, SARS-Cov2, is mainly transmitted by aerosols and droplets generation,<sup>1</sup> being those examinations able to generate aerosols like intubation of gastrointestinal tract during a digestive motility examination potentially infectious. Many scientific societies (ESNM, ASENEM, ANMS, and ANMA) have developed guidelines with recommendations on how to perform digestive motility examinations during the pandemic.<sup>2-5</sup> Although some recommendations are common, because of the shortage of studies evaluating the efficacy of different measures, each guideline has its own particularities. We report our experience using RT-PCR test and symptom-based questionnaire before performing a digestive motility examination as a screening test during the third COVID-19 wave in Catalonia, our referral area. Third wave lasted from December 31, 2020, to February 28, 2021, with a detection rate of 324 cases/ 100,000 habitants during the crest of the wave.

All consecutive patients referred to the Digestive Motility Lab for performing an outpatient motility examination during the third wave were prospectively included. Following ESNM recommendations, a symptom-questionnaire was administered to each patient in a telephonic call performed by a trained nurse 7 days before the exploration. In addition, 2 days before the appointment day, a RT-PCR test for COVID-19 detection was performed using nasopharyngeal swab. In case of positive PCR test, the examination was canceled and a telephonic follow-up was done to register the presence of late symptoms and infections evolution.

During the third wave, 224 patients (73% women, mean age 58 years) underwent a PCR test and answered the telephonic symptom-questionnaire before a scheduled motility examination. The scheduled examinations were esophageal manometry, either isolated (13%), or combined with pH measurement (36%), and anorectal manometry or biofeedback training (51%).

During the phone contact, only two patients referred some symptoms: one dyspnea and one cough. None of these patients with symptoms had a positive PCR test. Two patients from the 224 who also completed the questionnaire had a positive PCR test; both had asymptomatic infection. No patient reported recent contact with COVID-19-infected subjects.

Due to the low rate of reported symptoms and contacts using the telephonic questionnaire and its low correlation with PCR result,

we recommend to reconsider performing telephonic symptom-questionnaires before motility examinations and strengthening the recommendation to always maintaining a safe environment in the motility laboratories and using adequate personal protection equipments.

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## DISCLOSURE

AA and JS declared none.

## AUTHORS' CONTRIBUTION

AA involved in acquisition of data; analysis and interpretation of data; and drafting of the manuscript and statistical analysis. JS involved in study concept and design; analysis and interpretation of data; and critical revision of the manuscript for important intellectual content.

## KEYWORDS

COVID-19, RT-PCR, screening test

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