## Background and aim

During the COVID pandemic the daily practice of endoscopic services has deeply changed. The risk of viral transmission to healthcare professionals and patients has strongly influenced the patient triage before endoscopy, the setting of the waiting rooms, the hygienic protocols for the endoscopic suites and the instruments, the use of the personal protective devices. Since March 2020, according to the Italian government restrictions, the need to limit the access to hospitals only for urgent or oncological treatments, either for ambulatory procedures or for admissions to wards, has postponed many elective exams. Aim of the study was to assess how the EUS procedures have changed as compared to 2019 in an Italian endoscopy unit of a provincial capital hospital (Mantua, Lombardy).

## Material and methods

We retrospectively compared our EUS procedures in the COVID period (March 2020 - February 2021) to those in the pre-COVID period (March 2019 - February 2020).

## **Results**

In the COVID period we effected 371 EUS procedures, 80 less than the previous 12 months (-17.7%); this decrease concerned more the outpatients (-20.3%) than the inpatients (-15.6%). In detail we identified 3 four-month phases with a different trend. In the first one (March 2020 – June 2020) we performed 88 exams; during March 2019 - June 2019 they had been 145 (-39.3%). In the second phase our procedures did not decrease (160 from July 2020 to October 2020, 151 from July 2019 to October 2019). In the third phase (November 2020 - February 2021) the procedures were 123, while from November 2019 to February 2020 they had been 155 (-20.6%). As regards the final EUS diagnosis, in the COVID period 25.2% of cases resulted neoplastic diseases, whereas in the 12-months before malignancy was detected in 23.4% of patients.

## **Conclusions**

The drop rate in our EUS activity was parallel to the COVID incidence in Lombardy, that showed a first peak (with up to 6000 new cases / day) from March 2020 to May 2020, a following low-incidence plateau (with <1000 cases / day) from June 2020 to September 2020, and a successive second peak (with >10000 cases / day) from October 2020 to February 2021. This tendency could reflect either the outpatients' low propensity to schedule exams in the riskiest periods, or the transformation of some internal medicine or surgical wards in COVID divisions when the need for such admissions was greater. Despite this decreased overall EUS activity, in the COVID period the oncological EUS procedures have been relatively guaranteed.

