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The impact of the COVID-19 pandemic on endoscopic ultrasound procedures in a high-volume endoscopy unit in Brazil

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HIGLIGHTS

- In pancreatic neoplasms the EUS plays a key role in the management.
- During the pandemic period, lockdown measures prevented patients with comorbidities from performing EUS.
- The D-EUS decreased during COVID-19, while I-EUS increased and EUS-TA was the most commonly I-EUS procedure performed, with no increase in adverse events.
- Despite the moderate impact of the pandemic period in endoscopic services around the world, EUS-TA of solid and cystic tumors of the pancreas was the main indication.

ABSTRACT – Background – Reports of the impact of the 2020 COVID-19 pandemic period/2020 on endoscopic ultrasound (EUS) are scarce. **Objective –** We analyzed the impact of the pandemic period/2020 on the demographics, indications, and number of diagnostic EUS (D-EUS) and interventional EUS (I-EUS) procedures performed in a high-volume endoscopy unit compared with the previous non-pandemic period/2019. **Methods –** We retrospectively reviewed the medical records of all patients undergoing D-EUS or I-EUS from March 1, 2019, to February 29, 2020 (non-pandemic period/2019) and from March 1, 2020, to February 28, 2021 (pandemic period/2020). Data compared between the study periods included sex, age, comorbidities, EUS findings and diagnosis, need for interventional procedures during EUS, and adverse events (AEs). Results were significant at $P<0.05$. **Results –** EUS procedures decreased from 475 in the non-pandemic period/2019 to 289 in the pandemic period/2020, accounting for a 39% reduction. In non-pandemic period/2019, 388 (81.7%) D-EUS and 88 (18.5%) I-EUS were performed, against 206 (71.3%) D-EUS and 83 (28.7%) I-EUS in pandemic period/2020 ($P=0.001$). Only 5/289 (1.7%) patients had COVID-19. Fewer patients with comorbidities underwent EUS during pandemic period/2020 due to lockdown measures ($P<0.001$). D-EUS decreased, whereas I-EUS increased ($P<0.001$). EUS-guided tissue acquisition (EUS-TA) was the most common I-EUS, performed in 83/289 (28.7%) patients in pandemic period/2020, against 88/475 (18.5%) in non-pandemic period/2019 ($P=0.001$). AEs did not differ significantly between the study periods. **Conclusion –** Pandemic Period/2020 had a moderate impact on reducing EUS procedures due to the risks involved. Although I-EUS increased, EUS-related AEs did not. Solid and cystic pancreatic tumors remained a major indication for EUS-TA even during the pandemic period/2020.

Keywords – Endoscopic ultrasound; SARS-CoV-2; pandemics; diagnosis; pancreatic neoplasms; tissue acquisition.

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INTRODUCTION

The clinical manifestations of SARS-CoV-2 infection range from asymptomatic or mild disease to severe respiratory repercussions, such as respiratory failure, multiple organ failure, and even death[1-5]. COVID-19 has affected the world since December 2019. In Brazil, its effects became apparent in February 2020 and continued fiercely until January 2021. This pandemic period hindered proper diagnosis and treatment of many diseases, negatively affecting hospitals' routine practices and patient care[6]. Most elective procedures were delayed or cancelled during the initial peak of COVID-19 to ensure the safety of patients and health professionals and to make beds available for patients infected with SARS-CoV-2[6,7]. Hospitals also experienced a significant reduction in elective screening, being limited to urgent or emergent conditions and high-priority cases according to the American Society for Gastrointestinal Endoscopy (ASGE) and the European Society of Gastrointestinal Endoscopy (ESGE) guidelines[8,9].

Health professionals and patients in endoscopy units are at increased risk of SARS-CoV-2 infection by airborne, direct contact, or fecal-oral transmission[2,10]. Airborne transmission associated with endoscopic procedures has been reported, rendering routine upper gastrointestinal endoscopy (UGE), colonoscopy (COL), endoscopic retrograde cholangiopancreatography (ERCP), and endoscopic ultrasound (EUS) high-risk procedures for SARS-CoV-2 infection[1,11-14]. This scenario has had a negative impact on medical and hospital care worldwide, reducing the number of elective examinations.

Performing an endoscopic examination during the initial COVID-19 outbreak was a major challenge[10-15]. The impact of COVID-19-related restrictions on the number of procedures and even on the indications for UGE, COL, and ERCP has been well documented, but there are no robust reports of this impact on EUS in a high-volume endoscopy unit. We found only a letter to the editor warning of a decrease of up to 49% in pancreatic EUS examinations performed in early 2020 compared with the previous non-pandemic year[16].

This study aimed to analyze the impact of the 2020 COVID-19 pandemic period/2020 on the demographics, indications, and number of diagnostic-EUS (D-EUS) and interventional-EUS (I-EUS) procedures performed in a high-volume endoscopy unit in comparison with the previous non-pandemic period/2019.

METHODS

Study design and patient selection

We conducted a single-center, cross-sectional study at the Digestive Endoscopy Unit of the Moriah Hospital, Brazil. We included all patients undergoing D-EUS or I-EUS from March 1, 2019, to February 29, 2020 (non-pandemic period/2019) and from March 1, 2020, to February 28, 2021 (pandemic period/2020). The study was approved by the Institution's Research Ethics Committee (No. 53159821.7.0000.5455) and followed the tenets of the Declaration of Helsinki regarding the confidentiality of participants' data.

Data collection

We retrospectively reviewed electronic medical records and reports of complementary and laboratory tests to collect patient data, including sex, age, comorbidities, symptoms, EUS findings and diagnosis, and need for interventional procedures during EUS. SARS-CoV-2 infection was confirmed by reverse transcription-polymerase chain reaction (RT-PCR) and/or computed tomography (CT) if necessary, according to the hospital protocol during the pandemic period/2020.

Diagnostic endoscopic ultrasound

D-EUS is performed with a thin, flexible, radial echoendoscope equipped with a miniature ultrasound probe (transducer) attached to the end of the device[17]. The echoendoscope is inserted into the gastrointestinal tract for diagnostic ultrasound scanning.

Interventional endoscopic ultrasound

I-EUS encompasses a wide range of procedures including EUS-guided tissue acquisition (EUS-TA), commonly used in the diagnostic assessment of solid and cystic pancreatic tumors, EUS-guided drainage of intra-abdominal fluid collections (EUS-DRA), EUS-guided sclerosing agent or coil injection for gastric

varices (EUS-INJ), and EUS-guided celiac plexus neurolysis (EUS-CPN) with absolute alcohol and/or its injection into pancreatic cysts[6,18]. EUS-guided gastrostomy (EUS-GAS) can be performed in cases of failed conventional percutaneous endoscopic gastrostomy[19].

Adverse events

Adverse events (AEs) were documented at the time of the procedure and at hospital discharge, after which patients were called daily from day 1 to day 30 to monitor for AEs. AEs were considered immediate if they occurred during or within 24 hours of the procedure, early between 1 and 7 days, and late after 7 days of the procedure. AE severity was classified based on patient length of hospital stay: mild if requiring hospitalization for ≤3 days; moderate if requiring hospitalization for 4–10 days; and severe if requiring hospitalization for >10 days, or surgery, or admission to the intensive care unit[20].

AEs included bleeding, acute pancreatitis (AP), infection, perforation, choleperitoneum, and intramural hematoma of the gastrointestinal tract. An actual or potential AE was evaluated considering clinical, laboratory, and imaging criteria. In some cases, these AEs required hospitalization or even surgical intervention at the discretion of the medical team. The diagnosis of AP required two of the following three criteria: upper abdominal pain, imaging abnormalities, and amylase or lipase activity 3 times greater than the upper limit of the reference range[21]. Bleeding was defined as the presence of blood in the intestinal lumen during or after the procedure (found in stool or vomit). Perforation was determined by severe abdominal pain, hypertympanic percussion (drum-like sounds) of the right anterior chest over the liver, and imaging abnormalities. Infection was determined by the presence of fever, tachycardia, dyspnea, or an abnormal leukocyte count associated with isolation of the infectious agent or a positive culture. Choleperitoneum was defined as any abdominal pain, fever, or signs of peritoneal irritation confirmed by paracentesis. Intramural hematoma was identified during the procedure.

Follow-up

A strict interview protocol was used after the completion of EUS. Outpatients undergoing D-EUS and I-EUS received a follow-up form with details of the procedure, information about potential AEs, and a telephone number to contact the hospital. Patients were instructed to contact the hospital staff immediately in case of abdominal discomfort, pain, or fever. In addition, an outpatient visit with the attending physician was scheduled for each patient between 1 and 2 weeks after the procedure to discuss the results, occurrence of AEs, and additional strategic decisions.

Statistical analysis

We analyzed the number, indications, and risk factors of patients with COVID-19 and the outcomes of patients undergoing D-EUS and I-EUS in a major tertiary hospital during the PaP/2020 and compared them with data from the previous non-pandemic period (nPP/2019). All data were entered into an excel spreadsheet and statistically analyzed with R, version 3.3.1. Categorical variables were analyzed by Pearson's chi-square test or Fisher's exact test. Independent tests or tests of association were used to examine whether the frequency of a category was as expected, or whether it was influenced by other characteristics. The Mann-Whitney U test was used to compare variables with two categories, particularly numerical variables (such as age), when the data were not normally distributed. A $P<0.05$ was considered significant for all analyses.

RESULTS

Characteristics of outpatients and patients infected with SARS-CoV-2

A total of 475 EUS procedures were performed in the non-pandemic period/2019, against 289 in the pandemic period/2020, accounting for a 39% reduction in examinations performed in the pandemic period/2020. As for the type of procedure, 388 (81.7%) D-EUS and 88 (18.5%) I-EUS were performed in the non-pandemic period/2019, whereas 206 (71.3%) D-EUS and 83 (28.7%) I-EUS were performed in the pandemic period/2020. Therefore, the percentage of D-EUS decreased, whereas the percentage of I-EUS increased ($P=0.001$) during the pandemic period/2020.

Patients undergoing EUS did not differ significantly in age, sex, or symptoms between the two study periods, so a homogeneous population was obtained in both periods. Only 5/289 (1.7%) patients had a confirmed diagnosis of COVID-19, classified as mild in two patients, moderate in two, and severe in one. Among these patients, 3/206 (1.4%) underwent D--EUS and 2/83 (2.4%) underwent I-EUS. In the non--pandemic period/2019, 200 (42.1%) patients undergoing I-EUS had symptoms vs 128 (44.3%) in the pandemic period/2020, with no significant difference between them (P=0.606) (TABLE 1).

Comorbidities

In the non-pandemic period/2019, 170/475 (35.8%) patients had comorbidities, against 65/289 (22.5%) in the pandemic period/2020 (P<0.001). Fewer patients with comorbidities underwent EUS during the pandemic period/2020 due to lockdown measures (TABLE 1). Dyslipidemia was found in 45/475 (9.5%) patients and hypothyroidism in 24/475 (5.1%) in the non-pandemic period/2019, against 11/289 (3.8%) and 4/289 (1.4%), respectively, in the pandemic period/2020 (P<0.05). Other comorbidities did not differ significantly between non-pandemic period/2019 and pandemic period/2020 (P>0.05) (TABLE 2).

D-EUS and I-EUS indications

The main indication for EUS was abdominal pain of biliary origin, performed in 171/475 (36.0%) patients in the non-pandemic period/2019 and in 86/289 (31.5%) in the pandemic period/2020 (P=0.19). There was a significant difference between patients undergoing EUS to identify the etiology of pancreatic

TABLE 1. Characteristics of outpatients undergoing EUS in the 2020 COVID-19 pandemic period (PaP/2020) compared with the previous non-pandemic period (nPP/2019).

Variable	Non-pandemic period/2019	Pandemic period/2020	*P*
Number of patients	475	289	–
Mean age(y), median (IQR)[a]	52.9 (11–93)	54.1 (12–94)	0.440
Gender: female(%) / male (%)[b]	285 (60) / 190 (40)	185 (64) / 104 (36)	0.303
Symptoms[b]			0.606
No (%)	275 (57.9)	161 (55.7)	
Yes (%)	200 (42.1)	128 (44.3)	
Comorbidity[c]			<0.001
No (%)	305 (64.2)	224 (77.5)	
Yes (%)	170 (35.8)	65 (22.5)	

[a]Mann-Whitney U test; [b]Pearson's chi-square test; [c]Fischer's exact test. Bold indicates statistical significance.

TABLE 2. Type of comorbidities in patients undergoing D-EUS and I-EUS in the 2020 COVID-19 pandemic period (PaP/2020) compared with the previous non-pandemic period (nPP/2019).

Comorbidity[a]	Non-pandemic period/2019	Pandemic period/2020	*P*
Number of patients	475	289	–
Hypertension[a]	86 (18.1)	37 (12.8)	0.067
Diabetes mellitus[a]	52 (10.9)	25 (8.7)	0.369
Dyslipidemia[a]	45 (9.5)	11 (3.8)	0.006
Obesity[a]	15 (3.2)	10 (3.5)	0.986
Cancer[a]	10 (2.1)	6 (2.1)	>0.999
Hypothyroidism[b]	24 (5.1)	4 (1.4)	0.009
Chronic renal disease[b]	1 (0.2)	3 (1)	0.561
Coronary heart disease[b]	7 (1.5)	2 (0.7)	0.495
Chronic pulmonary disease[b]	4 (0.8)	2 (0.7)	>0.999
Liver disease[b]	2 (0.4)	1 (0.3)	>0.999
Heart failure	5 (1)	0 (0)	–

[a]Pearson's chi-square test; [b]Fischer's exact test. Bold indicates statistical significance.

tumors (*P*=0.019) and AP (*P*=0.006). Although the total number of examinations decreased from non-pandemic period/2019 to pandemic period/2020, the percentage of patients with pancreatic tumor and AP screened in both periods increased from 17.8% (85/475) to 25.3% (73/289) and from 1.8% (9/475) to 5.9% (17/289), with *P*=0.019 and *P*=0.006, respectively. EUS was indicated for the differential diagnosis between subepithelial tumor (SET) and extrinsic compression (ExtC) of the gastrointestinal tract in 101/475 (21.2%) patients in the non-pandemic period/2019 and in 40/289 (14.5%) patients in the pandemic period/2020 (*P*=0.027).

In the pandemic period/2020, there was a decrease in D-EUS indications, mainly due to the SET vs ExtC indication, with a percentage increase in I-EUS (*P*<0.001), even with a 39% reduction in EUS procedures compared with the non-pandemic period/2019. EUS-TA was the most common I-EUS procedure, performed in 83/289 (28.7%) patients in the pandemic period/2020 vs 88/475 (18.5%) in the non-pandemic period/2019 (*P*=0.001), revealing the need to perform EUS-TA even during the pandemic as the most important indication for the diagnostic assessment of solid and cystic pancreatic tumors (TABLE 3).

TABLE 3. EUS indications and type of EUS procedures performed in the 2020 COVID-19 pandemic period (PaP/2020) compared with the previous non-pandemic period (nPP/2019).

Outpatient EUS indication	Non-pandemic period/2019	Pandemic period/2020	*P*
Number of patients	475	289	–
Indications[a]			
Other Indications			
Abdominal pain[a]	171 (36)	86 (31.5)	0.190
Differential diagnosis – SET vs ExtC[a]	101 (21.2)	40 (14.5)	0.027
GI cancer staging[a]	33 (6.9)	28 (10)	0.205
Endometriosis[a]	17 (3.5)	4 (1.7)	0.162
Lymph node examination[b]	5 (1.1)	1 (0.3)	0.417
Pancreatic diseases			
Pancreatic mass[a]	85 (17.8)	73 (25.3)	0.019
Acute pancreatitis etiology[a]	9 (1.8)	17 (5.9)	0.006
Chronic pancreatitis diagnosis[b]	6 (1.2)	2 (0.7)	0.717
Suspected pancreas divisum[b]	2 (0.4)	1 (0.3)	>0.999
Biliary diseases			
Gallbladder disease[a]	27 (5.6)	15 (5.2)	0.061
Cholestatic syndrome[a]	11 (2.3)	14 (4.8)	0.090
Suspected choledocholithiasis[a]	8 (1.6)	8 (2.8)	0.451
Type of EUS procedure[a]			
D-EUS	388 (81.7)	206 (71.3)	0.001
I-EUS	88 (18.5)	83 (28.7)	>0.999
EUS-TA[a]	78 (16.4)	74 (25.6)	0.498
EUS-DRA[b]	7 (1.3)	3 (1)	0.714
EUS-CPN[b]	3 (0.6)	4 (1.4)	–
EUS-INJ (gastric varices - coil)	0 (0)	1 (0.3)	–
EUS-GAS	0 (0)	1 (0.3)	>0.999
Adverse events–EUS-TA[c]			–
Bleeding	2 (2.5)	1 (1.3)	–
Mild acute pancreatitis	1 (1.3)	0 (0)	
Death	0 (0)	0 (0)	

D-EUS: diagnostic endoscopic ultrasound; I-EUS: interventional endoscopic ultrasound; EUS: endoscopic ultrasound; SET: subepithelial tumor; ExtC: extrinsic compression; GI: gastrointestinal. D-EUS, diagnostic EUS; I-EUS, interventional EUS; EUS-TA, EUS-guided tissue acquisition; EUS-DRA, EUS-guided drainage; EUS-CPN, EUS- guided celiac plexus neurolysis; EUS-INJ, EUS-guided injection; EUS-GAS, EUS-guided gastrostomy. [a]Pearson's chi-square test; [b]Fischer's exact test; [c]Mann-Whitney U test. Bold indicates statistical significance.

Adverse events

No AEs were observed in patients undergoing D--EUS or I-EUS in either study period. However, self--limited bleeding from the stomach wall was observed in 2/78 (2.5%) patients undergoing EUS-TA in the non-pandemic period/2019 vs 1/74 (1.3%) patient in the pandemic period/2020, all of whom were treated conservatively. In the non-pandemic period/2019, 1/78 (1.3%) patient developed mild AP after EUS-TA in a cystic pancreatic lesion. There were no deaths in this study.

DISCUSSION

Endoscopic intervention was considered a high--risk procedure for SARS-CoV-2 infection during the initial COVID-19 outbreak due to airborne transmission via droplets and aerosols or the presence of the virus in nasopharyngeal secretions and fecal material[22,23]. Strict safety measures became necessary to maintain the quality and standard of excellence of endoscopic procedures during the pandemic period/2020 while ensuring the safety of patients and health professionals. These measures included the use of personal protective equipment and the need for additional complementary tests, such as nasopharyngeal swab for the screening and detection of SARS--CoV-2 infection and chest CT in complex cases[23].

Government authorities have imposed several restrictions on routine medical practice, including digestive endoscopy, in order to redirect resources to care for patients infected with SARS- CoV-2 and reduce the risk of infection. Government lockdown policies have caused patients to avoid visits to the hospital, unless extremely necessary, thus leading to a delay in diagnosis in some cases. As management and screening guidelines vary depending on the resources, epidemiological conditions, and knowledge available in each country, the screening protocols commonly used in multicenter studies include symptom-screening questionnaires, nasopharyngeal swabs, and chest CT. In our center, all patients were administered a screening questionnaire, followed by a detailed clinical examination and nasopharyngeal swab testing, with chest CT being reserved for patients with positive SARS-CoV-2 swab results or respiratory symptoms.

In the present study, we analyzed data from patients undergoing D-EUS and I-EUS in a major tertiary EUS center specializing in the investigation and treatment of biliary and pancreatic diseases, located in the city of São Paulo, Brazil, which was a major COVID-19 hot spot strongly affected by lockdown measures. In the pandemic period/2020, cancer screening decreased substantially compared with the non-pandemic period/2019, with a mean reduction of 90% for COL, 91% for flexible sigmoidoscopy, and 86% for UGE, but only 44% for ERCP[24,25]. Overall, our center experienced a reduction in the number of D-EUS when used for the differential diagnosis between SET and ExtC of the gastrointestinal tract, with no change in the population undergoing EUS for the staging of neoplasms and/or preneoplastic lesions during lockdown. Our study detected a 39% reduction in EUS during the pandemic period/2020, which is consistent with previous findings showing a 49% decrease in pancreatic EUS during the first 3 months of the pandemic[16]. However, a proportional increase in I-EUS was observed in the pandemic period /2020 compared with the non-pandemic period/2019. It was not a surprise to us the increased percentage of patients examined for the diagnosis of pancreatic tumors or for the elucidation of the etiology of AP episodes, not even when EUS--DRA of pancreatic pseudocysts was indicated, as the same scenario was observed in a major Italian center similar to ours[16].

Not surprisingly, our study showed that most patients undergoing D-EUS or I-EUS during the non--pandemic period/2019 had comorbidities, whereas in the pandemic period/2020 most screened patients did not. Patients with comorbidities were identified as being in a high-risk group for severe COVID-19 and, therefore, more strict social distancing measures applied to them. We found no robust data in the literature on the impact of the pandemic period/2020 on EUS for biliary and pancreatic diseases. We found only a letter to the editor from an Italian center similar in size to ours[16]. Since many centers as ours have combined their EUS and ERCP services, we compared some points of this discussion with studies on the impact of the Pandemic Period/2020 in patients undergoing ERCP. A retrospective study reported an 83% reduction in total UGE volume during the pandemic period/2020, but curiously there was a slight

increase in ERCP volume, which also occurred in our center, with an increase from 16.4% to 25.6% in EUS-TA procedures for pancreatic tumors. The same was observed for I-EUS procedures, increasing from 18.5% to 28.7% given the need to achieve a more accurate diagnosis of the tumor[26].

An Italian study of 804 patients undergoing ERCP for different indications showed a 44% reduction in the total volume of procedures during the pandemic period/2020 and a rate of 2.7% of patients infected with SARS-CoV-2[27]. Our study showed a 39% reduction in the total volume of procedures during the pandemic period/2020, and only five patients (1.7%) undergoing D-EUS (n=3) and I-EUS (n=2) were infected with SARS-CoV-2.

In our center, the overall AE rate related to D--EUS and I-EUS was 3.8% in the non-pandemic period/2019 and 1.3% in the pandemic period/2020. There were no deaths in either study period. A possible explanation is that EUS-TA was performed with a dedicated 20G microCore needle for tissue acquisition in cystic and solid pancreatic tumors. AEs did not differ significantly between nPP/2019 and pandemic period/2020.

Abdominal pain of biliary origin as an indication for EUS was similar in both study periods (P=0.19), but the use of EUS for the staging and/or diagnosis of solid or cystic pancreatic tumors was more frequent during the pandemic period/2020 (P=0.019), as was its use for the identification of unexplained AP (P=0.006). However, the use of EUS for the differential diagnosis between SET and ExtC of the gastrointestinal tract was more frequent in the nPP/2019 (P=0.027). Thus, the reduction in D-EUS and increase in I-EUS indications (P<0.001) during the pandemic period/2020 suggest an increased need to address serious health problems. EUS-TA was the most common procedure performed in the pandemic period/2020 (P=0.001), indicating the need to perform EUS-TA even during the pandemic. Our findings showed that there were more precise and specific indications for I-EUS during the pandemic period/2020. This was possible because there were virtually no urgent or emergent indications for most of the EUS procedures performed, although it had no significant impact on patients who really needed I-EUS, mainly those who needed EUS-TA.

In a multicenter study of 16 patients with COVID-19 who underwent 18 ERCP procedures, both technical success and the rate of ERCP-related AEs were significantly lower in patients with COVID-19 than in controls[28]. Our study included only five patients with COVID-19 undergoing D-EUS (n=3) and EUS-TA (n=2), and none of them developed any EUS-related complications or AEs. The present study reflects the experience of our center in the use of safety measures and precautions within the resources available during the pandemic period/2020, which had an impact on all aspects of health services worldwide. This study has limitations related to its design as a single-center, retrospective study. Also, we included both D-EUS and I-EUS procedures primarily targeting biliary and pancreatic diseases. However, strengths of our study include the setting, a high--volume endoscopy unit, and the interventional procedures, all of which were performed by physicians with more than 10 years of experience in I-EUS. In conclusion, pandemic period/2020 had a moderate impact on reducing EUS procedures due to the risks involved, the quality of indications, and the number of patients with comorbidities undergoing EUS due to lockdown measures. The use of I-EUS increased, but EUS-related AEs did not. EUS-TA was most commonly indicated for the diagnostic assessment of solid and cystic pancreatic tumors even during the pandemic period/2020.

Authors' contribution

Conception and design, critical revision of the article, overall responsibility, and final approval of the article: Ardengh JC. Analysis and interpretation: Faria ATR, Silva BL, Micelli-Neto O. Data collection: Faria ATR, Krubniki BR, Silva BL. Writing the article: Faria ATR, Omairi TW. Statistical analysis: Omairi TW, Taglieria E, Micelli-Neto O. All authors have read and approved the final version of the article.

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RESUMO – Contexto – Os dados sobre o impacto da pandemia de COVID-19 2020 na ultrassonografia endoscópica (EUS) são escassos. **Objetivo –** Analisamos o impacto do período pandêmico/2020 na demografia, indicações e número das EUS diagnósticas (D-EUS) e intervencionistas EUS (I-EUS) realizados em uma unidade de endoscopia de alto volume e os comparamos com o período imediatamente anterior não-pandêmico/2019. **Métodos –** Revisamos retrospectivamente os prontuários de todos os pacientes submetidos a D-EUS ou I-EUS de 1 de março de 2019 a 29 de fevereiro de 2020 (período não-pandêmico/2019) e de 1º de março de 2020 a 28 de fevereiro de 2021 (período da pandemia/2020). Comparamos os dados entre os períodos do estudo incluímos o sexo, idade, comorbidades, achados e diagnóstico da EUS, necessidade de procedimentos intervencionistas durante a EUS e a ocorrência de eventos adversos (EAs). Os resultados foram significativos com $P<0,05$. **Resultados –** O número de ecoendoscopias diminuíram de 475 no período não-pandêmico/2019 para 289 no período pandêmico/2020, representando uma redução de 39%. No período não-pandêmico/2019 e pandêmico/2020 foram realizados 388 (81,7%) D-EUS e 88 (18,5%) I-EUS, contra 206 (71,3%) D-EUS e 83 (28,7%) I-EUS, respectivamente ($P=0,001$). Apenas 5/289 (1,7%) pacientes tinham COVID-19. Menos pacientes com comorbidades realizaram EUS durante o período pandêmico/2020 devido as medidas de bloqueio ($P<0,001$). D-EUS diminuiu, enquanto I-EUS aumentou ($P<0,001$). A EUS associada a aquisição tecidual (EUS-AT) foi a I-EUS mais comum, realizada em 83/289 (28,7%) pacientes no período pandêmico/2020, versus 88/475 (18,5%) no período não-pandêmico/2019 ($P=0,001$). Os EAs não diferiram significativamente entre os períodos do estudo. **Conclusão –** O período da pandemia/2020 teve impacto moderado na redução da EUS devido aos riscos envolvidos. Embora o I-EUS tenha aumentado, os EAs relacionados ao EUS não aumentaram. Os tumores pancreáticos sólidos e císticos permaneceram como uma das principais indicações para EUS-AT mesmo durante o período pandêmico/2020.

Palavras-chave – Ultrassonografia endoscópica; SARS-CoV-2; pandemia; diagnóstico; neoplasias de pâncreas; aquisição tecidual.

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