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Marta Vilça as no conflict of interests to declare

**BACKGROUND**

COVID-19 pandemia forced the country to lockdown and in March 2020 and reduce both primary health care and hospital in person consultations as well as stopped al the cancer screenings programs. closed the primary health care as well as cancer screening programs. In the first half of 2020, in England, a decrease in number of referrals for suspected breast cancer was reported, becoming 28% lower compared to the same period of 2019.<sup>1</sup> Similar data have been reported in others countries. A population-based study in Netherlands reported a decrease in incidence across all age groups and tumor stages (except satge IV) from 2018/2019 to 2020, mostly for DCIS and stager disease (p<0,05).<sup>2</sup>

**AIME**

To access de impact of COVID-19 pandemia in the new diagnosis of breast cancer in a terciary hospital, in Portugal.

**METHODS**

- Retrospective, cohort study
- Inclusion criteria:**
  - All patients with new diagnosis of breast cancer between March 2019 and March 2021
  - Referred to Hospital Pedro Hispano, Matosinhos

**Study flowchart**

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graph TD; A[All patients with new diagnosis of breast cancer referred to Hospital Pedro Hispano between March 2019 and March 2021] --> B[Cohort 1: Before COVID-19 Pandemia  
(March 2019 to March 2020)]; A --> C[Cohort 2: After COVID-19 Pandemia  
(March 2020 to March 2021)];
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- **Descriptive statistic:** median and IQR
- Comparative assessment between groups: **non parametric test** (Mann-whitney).
- Significance level: α= 0,05
- Statistic software: SPSS® V 25.0

RESULTS

Table1: Baseline characteristics

	COHORT 1 Before COVID-19 (N= 241)	COHORT 2 After COVID-19 (N=194)	p
Age (years), median(IQR)	60(51-69)	59(50-70)	
Stage at diagnosis, n(%)			<0,001
DCIS	32(12)	17(9)	
Stage I	123(51)	59(30)	
Stage II	57(24)	77(40)	
Stage III	23(10)	21(11)	
Stage IV	8(3)	20(10)	
Treatment, n(%)			0,377
Chemotherapy	119(49)	100(52)	

Legend: DCIS- ductal in situ carcinoma; IQR- interquartil range

Table2: TNM classification

	COHORT 1 Before COVID-19 (N= 241)	COHORT 2 After COVID-19 (N=194)	p
T value at diagnosis, n(%)			<0,001
T1a	8(3)	13(7)	
T1b	31(13)	17(9)	
T1c	91(38)	43(22)	
T2	69(29)	78(40)	
T3	6(3)	10(5)	
T4	3(1)	6(3)	
N value at diagnosis, n(%)			0,186
N0	138(57)	100(52)	
N1	45(19)	49(25)	
N2	19(8)	11(6)	
N3	4(2)	7(4)	
M value at diagnosis, n(%)			0,006
M0	203(84)	106(80)	
M1	7(3)	19(10)*	

\* 60% of them were diagnosis between Octobre 2020 and March 2021

**CONCLUSION**

This study shows a decreased in the new diagnosis of breast cancer after COVID-19 pandemia. More patients were diagnosed in advanced stage, and metastatic disease. This situation might have been caused by the absence of sreening programs, with the diagnosis being made mainly by self examination. The real impact on long-term prognosis is still unknown.

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