Presented at: For some years now, it has been observed and described that the age of pubertal onset is advancing, especially in girls, which could be justified by nutritional, lifestyle and/or environmental changes, although these are not well known. During COVID 19 pandemic and the confinement we experienced, many routines and habits of our life have been affected and modified. Have they been able to condition a real increase in precocious and advanced puberty?

We compared the incidence of first consultations made by early thelarchies between the months of March to December 2019 and between March and December 2020 at the Pediatric Endocrinology (PD) consultation in our hospital, and the increase in diagnosis of precocious puberty (PP) and advanced puberty (PA) in the cases evaluated for this reason, with the aim of demonstrating that the feeling that there has been in Primary Care as well as in the PD service about the increase in the incidence of these pathologies during confinement and the COVID season is real.

The study includes 77 patients who consulted for early thelarche in 2019 (group 1) and 99 in 2020 (group 2). Different variables have been assessed for each one: sex, age they were at the time of referral to the specialist, origin, family history of precocious puberty, weight, height, BMI, whether they had started adrenoche and moment of onset in relation to the thelarchy, bone age in the first consultation, difference between chronological age and bone age, sex hormone values, if a functional test was performed to study the gonadal axis (Procrin) and result of the same, abdominal ultrasound,

We could say that in 2020 an acceleration of puberty has been seen regardless of age, increasing the incidence statistically significantly in both PP and PA. But we can also observe that in 2020 there are more children who consult with a higher BMI and with an increase in weight gain in the last 6 months. This increase in weight could suggest a trigger effect due to an increase in fat mass and a greater number of advanced puberty.

With all this, it could suppose that a sedentary lifestyle, a change in habits, as well as an increase in weight have been able to influence the increase in the incidence of this pathology. Even so, more studies would be needed to determine well how these factors have affected and that others will analyze to really see how the influence has been.

QUERY by TELARQUIA: Has there been an increase due to the SARS-COV19 pandemic?

INTRODUCTION
For some years now, it has been observed and described that the age of pubertal onset is advancing, especially in girls, which could be justified by nutritional, lifestyle and/or environmental changes, although these are not well known. During COVID 19 pandemic and the confinement we experienced, many routines and habits of our life have been affected and modified. Have they been able to condition a real increase in precocious and advanced puberty?

AIM
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METHOD
The study includes 77 patients who consulted for early thelarche in 2019 (group 1) and 99 in 2020 (group 2). Different variables have been assessed for each one: sex, age they were at the time of referral to the specialist, origin, family history of precocious puberty, weight, height, BMI, whether they had started adrenoche and moment of onset in relation to the thelarchy, bone age in the first consultation, difference between chronological age and bone age, sex hormone values, if a functional test was performed to study the gonadal axis (Procrin) and result of the same, abdominal ultrasound,

RESULTS

Comparing 2019 vs 2020 of total visits
- Isolated thelarchies 45% vs 33% (P < 0.01 Student’s t for independent samples)
  37/77 vs 33/99
- Advance thelarchy 23% vs 35% (P < 0.001 Student’s t for independent samples)
  18/77 vs 35/99
- Early thelarchies 15% vs 25% (P < 0.01 Student’s t for independent samples)
  12/77 vs 25/99
- Lipomastia 4% vs 1% (P < 0.001 Student’s t for independent samples)
  3/77 vs 1/99
- Normal puberty 8% vs 3% (P < 0.001 Student’s t for independent samples)
  6/77 vs 3/99

CONCLUSIONS
We could say that in 2020 an acceleration of puberty has been seen regardless of age, increasing the incidence statistically significantly in both PP and PA. But we can also observe that in 2020 there are more children who consult with a higher BMI and with an increase in weight gain in the last 6 months. This increase in weight could suggest a trigger effect due to an increase in fat mass and a greater number of advanced puberty.

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