CHILDREN BORN SMALL FOR GESTATIONAL AGE TREATED WITH GROWTH HORMONE: EVOLUTIONARY ASPECTS
VM. Padín Vázquez, JL. Chamorro Martín, L. Rey Cordo, DA. Gómez Costa, JR. Fernández Lorenzo.
Hospital Álvaro Cunqueiro, EOXI Vigo.

Introduction
- Short for gestational age children (SGA): represent 20% of all children with short stature (stature less than -2 standars deviations). 10% of these can not catch-up.
- Growth hormone treatment (GH) is a recognized therapy for SGA children (authorized in Europe at 4 years old).
- There are studies that support that younger children are more responsive to therapy.

Methods
Retrospective descriptive study of SGA children treated with GH from 2010 to 2017.

We aimed to assess the anthropometric data at the beginning and after one year of treatment.

Results
The review includes 81 patients. 12.3% were multiple-gestations and 33.3% premature.

92.5% of the children had a birth length less than -2 SD and 58% a weight less than -2 SD. In 49.8% both measures were below -2 SD.

The mean age at the beginning of treatment was 6.08 years.

- The average GH dose initially was 0.038 mg/kg/day. We couldn’t prove relationship between GH dose and higher height velocity.
- We couldn’t prove relationship between increased delayed bone age and a greater response to treatment.

Conclusions
1. GH therapy is effective in SGA children with an increase of almost 1 SD after one year of treatment, increase in height velocity and adult height prediction.
2. Increases basal insulin levels but does not alter the other analytical parameters.
3. A greater basal insulin levels is observed in younger children.
4. The greater delay in bone age is not related to a greater treatment response.