



PREDICTIVE FACTORS FOR PREMATURE PUBARCHE IN A LARGE COHORT OF ITALIAN CHILDREN

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INTRODUCTION

- Premature pubarche refers to the appearance of pubic hair without other signs of puberty or virilization before 8 years in girls and 9 years in boys
- The etiology of premature pubarche is not known. Early maturation of the zona reticularis of the adrenal cortex with consequent increase of adrenal androgens? Hypersensitivity of hair follicle to steroid hormones?
- Predictor factors able to identify the evolution of premature pubarche are not known

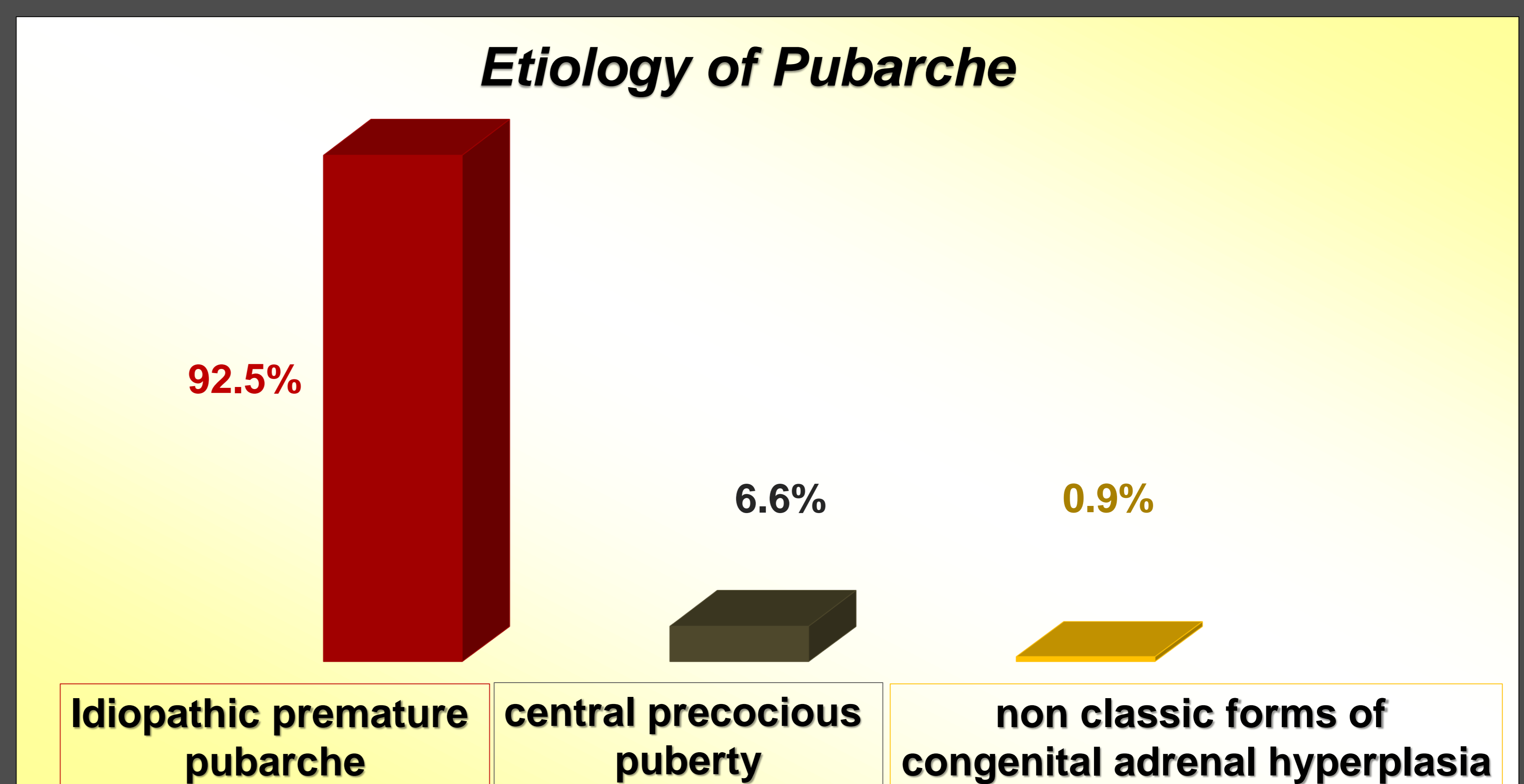
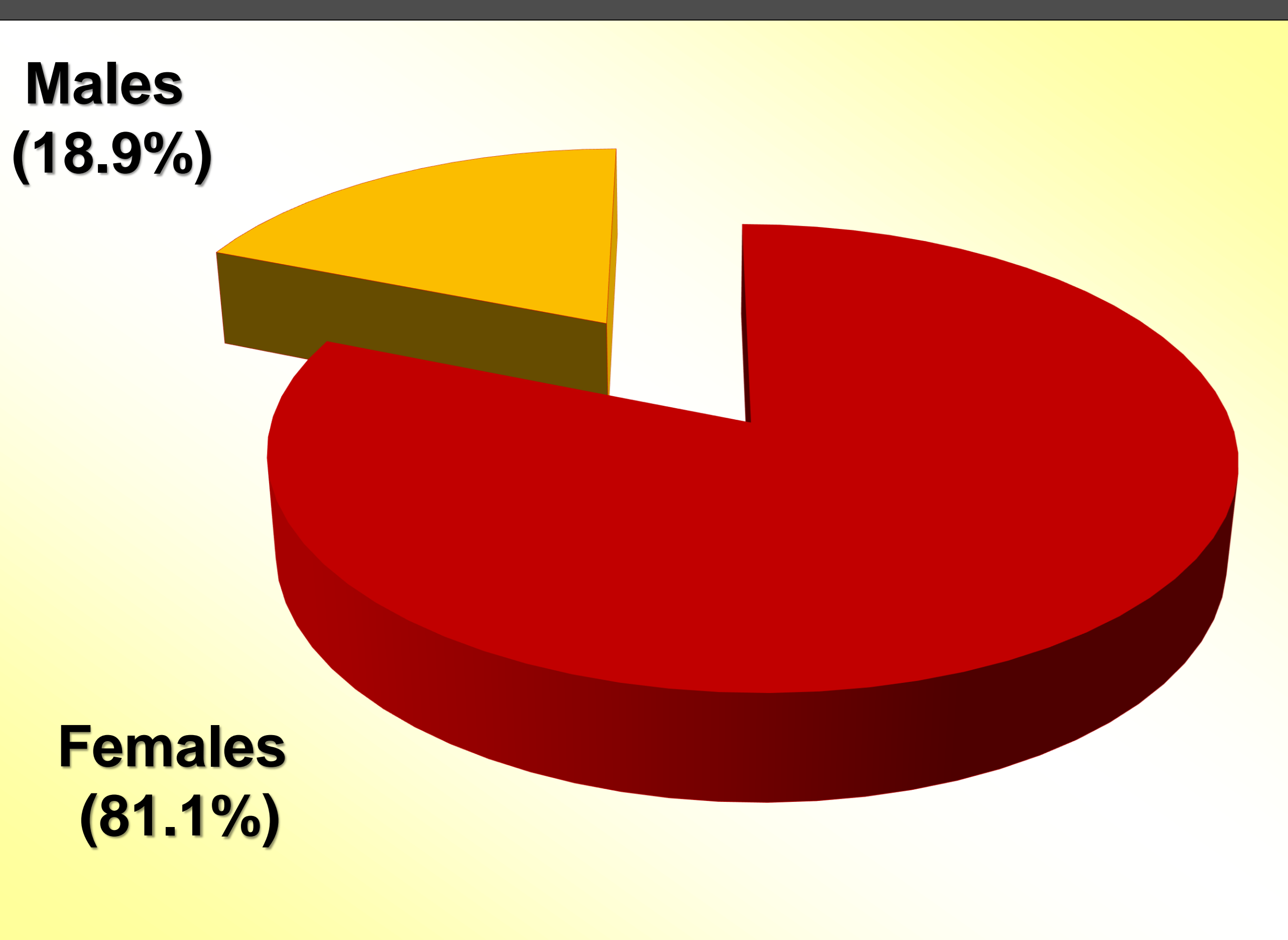
AIMS OF THE STUDY

- To evaluate the etiology of premature pubarche in a cohort of Italian children
- To detect some predictor factors able to identify how pubarche evolves

DESIGN

- All children born between 2001 and 2014 referred to our Service for a premature pubarche were enrolled ($n=334$)
- All of them were submitted to clinical exams (as bone age and hormonal levels) to identify the etiology of their premature pubarche

RESULTS



- The only predictive factor for an idiopathic premature pubarche was the BMI
- An early maturation of the zona reticularis of the adrenal cortex was identified by DHEAS levels higher than 40 $\mu\text{g}/\text{dL}$ and by $\Delta 4$ -androstenedione levels higher than 0.81 ng/mL

CONCLUSIONS

- In most cases the premature pubarche was idiopathic, leading to an increased BMI
- Higher values of DHEAS than 40 $\mu\text{g}/\text{dL}$ and higher $\Delta 4$ -androstenedione than 0.81 ng/mL suggest that premature pubarche was progressing