

Relation between levels of antimüllerian hormone and inhibin B and spontaneous puberty in patients with Turner syndrome – preliminary results

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Background

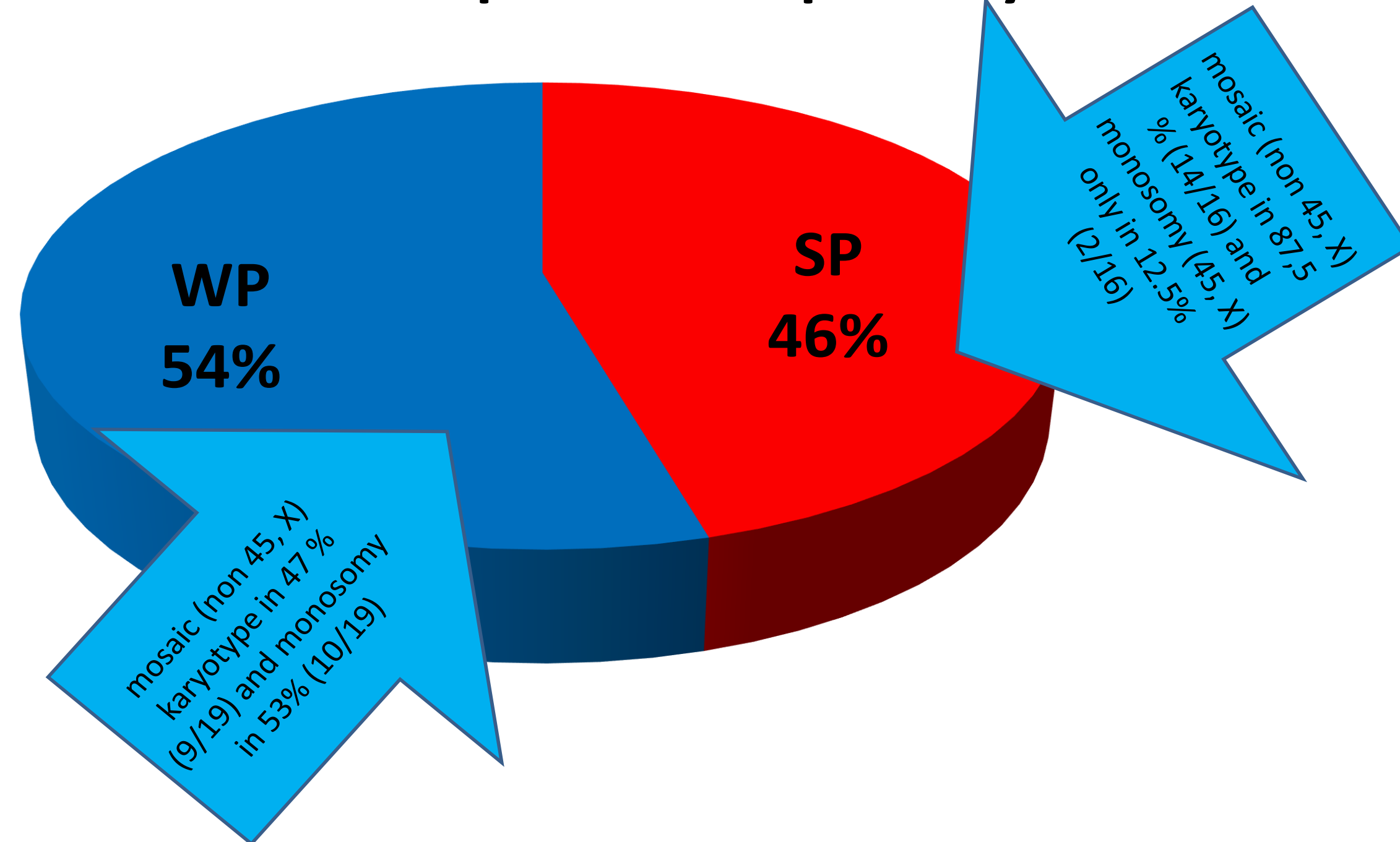
Spontaneous puberty occurs in 30 % of patients with Turner Syndrome. Its absence is an indication to the induction of puberty with hormone replacement therapy. To date no reliable markers of spontaneous puberty have been defined. The present study aimed to evaluate the usefulness of antimüllerian hormone and inhibin B assessment in predicting ovarian function and spontaneous puberty in girls with TS.

Material and Methods

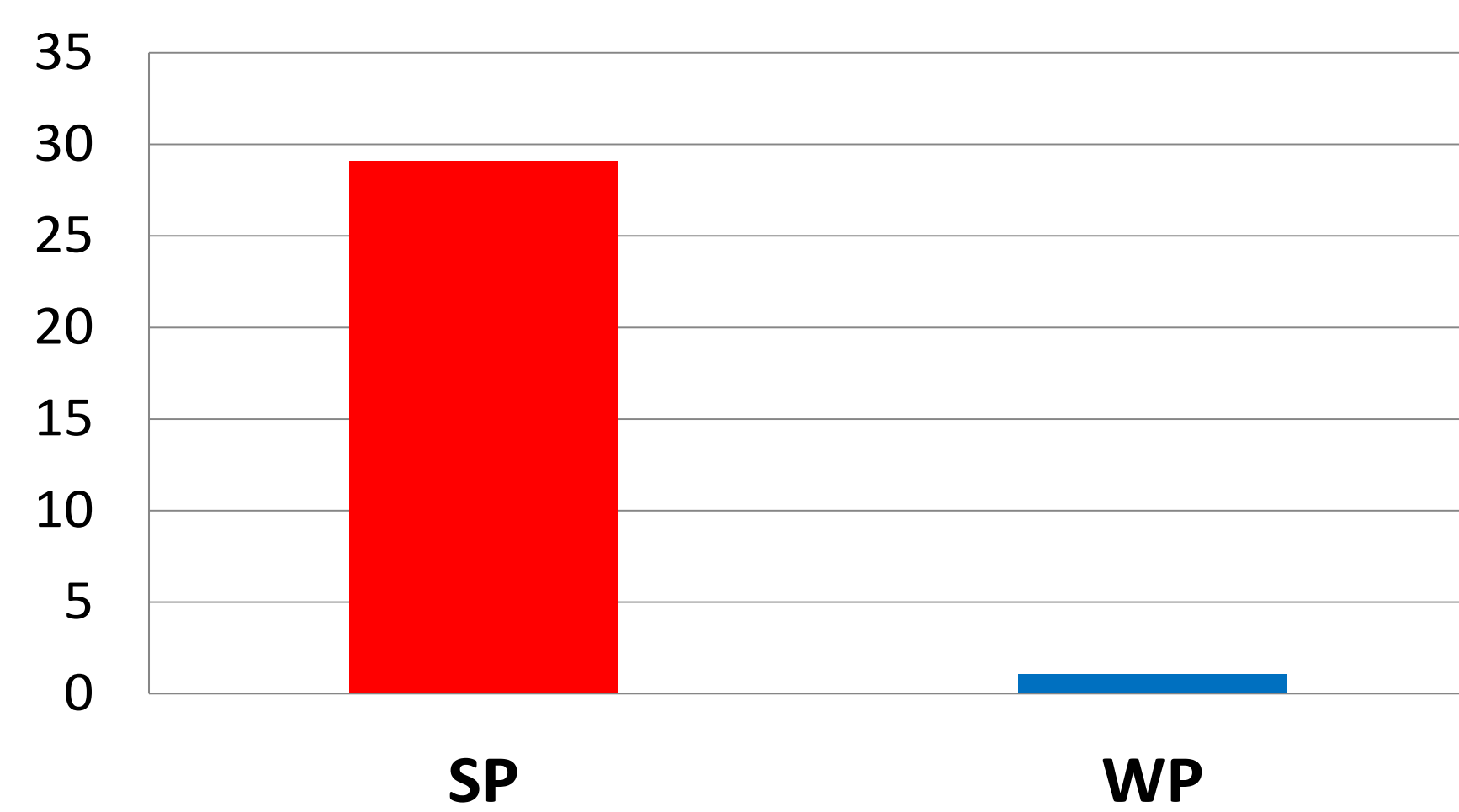
The study included 35 TS patients. Gonadal axis function parameters (LH, FSH and estradiol levels) were evaluated at the age of physiological puberty (10-12 y.o), before introduction of hormonal replacement therapy. Additionally AMH and inhibin B levels were assessed. In follow up patients were divided into 2 groups: with **spontaneous puberty (SP)** and without (WP).

Results

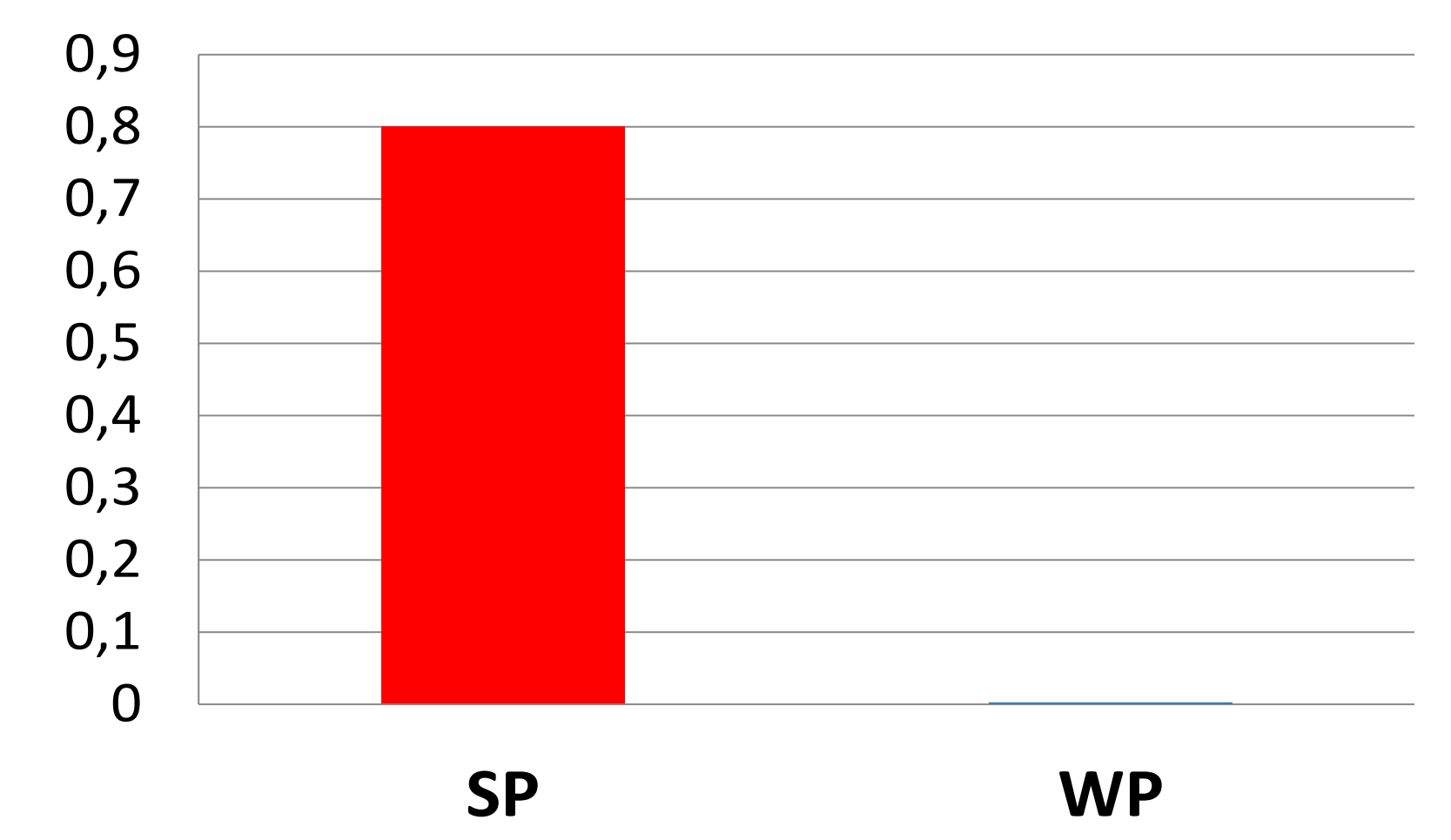
Occurrence of spontaneous puberty



mean inhibin B level in SP and WP patients [pg/mL]



mean AMH level in SP and WP patients [ng/mL]



mean estradiol level in SP and WP patients [pg/mL]



mean FSH level in SP and WP patients [mIU/mL]



Spontaneous puberty occurred in 16 patients at the mean age of 10 years (9-12 years).

Interestingly, in three SP patients with not elevated FSH level (FSH<35mIU/ml) we found zero concentration levels of AMH and inhibin B.

Conclusion

AMH and inhibin B assessment may be a valuable complement to the diagnosis of ovarian function in patients with TS. Low levels of these parameters may indicate a risk of ovarian failure even in patients with spontaneous puberty and without hypergonadotropic hypogonadism.

References

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