

# COMBINATION THERAPY OF HYPOGONADOTROPIC HYPOGONADISM WITH RFSH AND HCG – CASE REPORT

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## INTRODUCTION

Combination therapy of recombinant follicle stimulation hormone (rFSH) and human chorionic gonadotropin (hCG) can increase testicular volume and potentially can improve fertility prognosis in comparison with testosterone or hCG monotherapy in patients with hypogonadotropic hypogonadism.

## AIM

to assess advantages and disadvantages of the treatment of HH with the combination of rFSH and hCG.

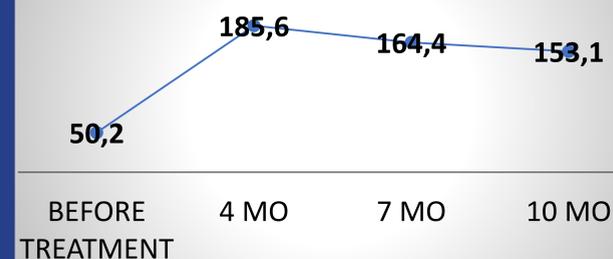
## MATERIALS

We report case of a 16-year old patient who presented with the complaints of no development of secondary sexual characteristics.

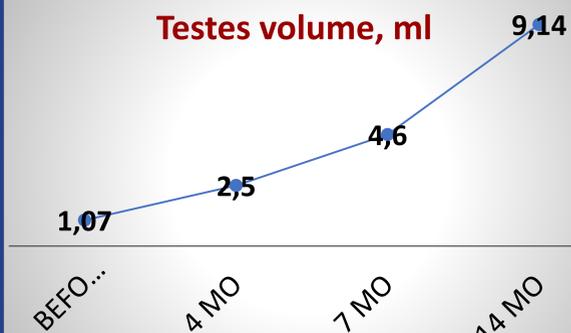
## RESULTS

	BEFORE TESTOSTERONE TEST	AFTER TESTOSTERONE TEST	4 MO	7 MO	10 MO	14 MO	16 MO
TESTES VOLUME, ml	1.07	1.12	2.5	-	4.6	9.14	-
TESTOSTERONE, nmol/l	1.05	0.9	3.5	20.3	1.5	-	16.5
AMH, ng/ml	56.04	81.4	172.7	31.92	45.22	-	10.56
INHIBIN B, pg/ml	50.2	64.1	185.6	164.4	153.1	-	-
ESTRADIOL, pg/ml	-	-	36.9	54.48	-	-	37.52
SHBG, nmol/l	115.5	-	95.6	85.9	65.9	44.2	-

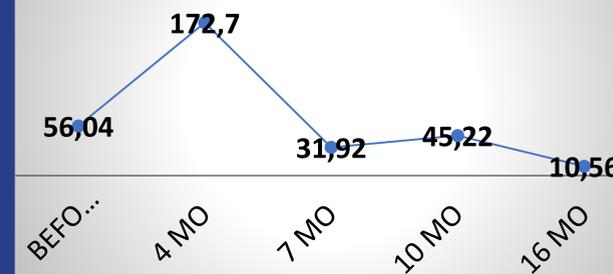
### Inhibin B, ng/ml<sup>2</sup>



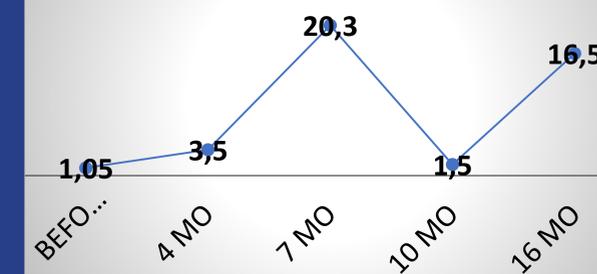
### Testes volume, ml



### AMH, ng/ml



### Testosterone, nmol/l



## CONCLUSIONS

1. Combination therapy of rFSH and hCG developed secondary sexual characteristics, raised testosterone with no estradiol increase.
2. Testicular volume 8-10-fold increased, inhibin B increased threefold. AMH firstly raised and then lowered.
3. Titration of hCG dose helped to induct and imitate the process of physiologic puberty according to gradually increased testosterone levels so we can expect better fertility prognosis.

## CONTACT INFORMATION

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