

Recombinant luteinizing hormone (rLH) associated with recombinant follicle stimulating hormone (rFSH) for ovarian stimulation: Decreased incidence of immature oocytes and better clinical outcomes



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OBJECTIVE

It has been demonstrated that the use of GnRH analogues decreases the concentration of LH available to developing follicles, nevertheless, both gonadotrophins, LH and FSH, are crucial to normal follicular development. Luteinizing hormone also plays an important role in oocyte maturation during natural cycles. However, whether patients undergoing COS may benefit from co-administration of r-LH and r-FSH, when either a GnRH-antagonist or a GnRH-agonist protocol is used is to be elucidated. The goal for the present study was to evaluate the effect of the combination of recombinant LH (rLH) with recombinant FSH (rFSH) on ICSI clinical outcomes.

RESULTS

Results concerning: Mature oocytes rate, PI-rate, MI rate, implantation rate and pregnancy rate when follicular stimulation was performed by using rFSH or rFSH associated with rLH.

	GnRH antagonist			GnRH agonist		
	FSH-only-	FSH-plus-LH-	p	FSH-only-	FSH-plus-LH-	p
Mature oocytes rate	77.2%	85.7%	<0.001	73.2%	80.1%	<0.001
PI-rate	6.5%	2.5%	<0.001	8.3%	6.0%	<0.001
MI rate	7.1%	5.5%	<0.001	10.1%	6.5%	<0.001
Implantation rate	24.4%	28.2%	<0.001	21.45%	26.0%	<0.001
Pregnancy rate	33.0%	38.0%	0.012	32.3%	33.1%	0.423

CONCLUSION

Decreased incidence of immature oocyte and better clinical outcomes are achieved by the use of r-LH associated with r-FSH for COS.

MATERIALS AND METHODS

