A comparative study of the follicular growth profile in conception and nonconception cycles

Zegers Hochschild,

Gomez Lira,

Parada,

Altieri Lorenzini,

To study the follicular growth profile of normal women, 25 multiparous volunteers were assessed daily by ultrasound to measure the growing follicle and underwent venipuncture daily for detection of the luteinizing hormone (LH) peak. Eleven patients conceived during the first cycle, 1 during the second cycle, and 1 during the third cycle. The 15 cycles where conception was not achieved showed unequivocal signs of ovulation (i.e., an LH peak and progesterone concentrations in the luteal phase > 20 nM/l). The mean prerupture follicular diameter was not significantly different in either group, 19.65 mm and 19.1 mm, respectively; however, the growth profile showed marked differences with a stabilization of follicular growth 24 hours prior to rupture in all patients in the conception group. On the other hand, the LH peak occurred within the 24 hours immediately preceding follicular rupture in the conception cycles; whereas in the nonconception group, this time interval extended up to 48 hour