

论著

卵巢储备功能下降患者颗粒细胞mtDNA拷贝数及4 977 bp缺失的研究

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摘要:

目的: 研究卵巢储备功能下降(DOR)患者颗粒细胞线粒体DNA(mtDNA)拷贝数和4 977 bp缺失情况, 初步探讨DOR患者颗粒细胞mtDNA结构的完整性。方法: 选取DOR组及对照组各50例, 分离提纯卵泡液中颗粒细胞, 提取DNA, RT-PCR相对定量颗粒细胞mtDNA拷贝数及PCR检测其4 977 bp缺失情况。结果: DOR组及对照组均未检测到mtDNA 4 977 bp缺失, 其拷贝数相对量差异亦无统计学意义(P>0.05)。结论: DOR患者颗粒细胞mtDNA结构基本完整, 颗粒细胞可作为DOR患者卵母细胞浆内线粒体自体移植的供体细胞。

关键词: 卵巢储备功能下降 颗粒细胞 线粒体DNA

Copy number and deletion of 4 977 bp of granular cell mitochondria DNA in patients with diminished ovarian reserve

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Abstract:

Objective To determine the copy number of granular cell mitochondria DNA (mtDNA) and deletion of 4 977 bp in patients with diminished ovarian reserve (DOR) to primarily study the structural integrity of granular cell mtDNA. Methods We selected 50 DOR patients and 50 patients with normal ovarian reserve (NOR). Granular cells in liquor folliculi of these patients were collected at ovum pick-up day. DNA was extracted from the granular cells. The mtDNA 4 977 bp deletion of granular cells was detected by PCR and the number of granular cells mtDNA copies was detected by real-time PCR. Results No 4 977 bp deletion of ovary granular cell mitochondria DNA in the 100 patients was detected. There was no significant difference in the relative quantity of granular cell mitochondria DNA in the DOR group and the NOR group. Conclusion The structure of granular cells mtDNA in DOR patients is complete and granular cells may be used as donor cells for DOR patients plasma autologous transplants mitochondrial.

Keywords: diminished ovarian reserve; granular cell; mitochondria DNA

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