

Polymorphism of the progesterone receptor gene associated with endometriosis in patients from Goiás, Brazil

I.R. Costa^{1,2,5}, R.C.P.C. Silva^{1,2,3}, A.B. Frare¹, C.T.X. Silva¹, B.M. Bordin^{1,2}, S.R. Souza¹, C.L. Ribeiro Júnior⁴ and K.K.V.O. Moura^{1,2}

¹Núcleo de Pesquisas Replicon, Pontifícia Universidade Católica de Goiás, Goiânia, GO, Brasil

²Departamento de Biomedicina, Pontifícia Universidade Católica de Goiás, Goiânia, GO, Brasil

³Hospital das Clínicas, Universidade Federal de Goiás, Goiânia, GO, Brasil ⁴Centro de Medicina Fetal e Reprodução Humana - FERTILE, Goiânia, GO, Brasil

⁵Santa Casa da Misericórdia de Goiânia, Goiânia, GO, Brasil

Corresponding author: I.R. Costa

E-mail: iasmimribeirodacosta@gmail.com

Genet. Mol. Res. 10 (3): 1364-1370 (2011) Received May 11, 2010 Accepted May 13, 2011 Published July 6, 2011 DOI 10.4238/vol10-3gmr913

ABSTRACT. We investigated a possible link between endometriosis and polymorphism of the progesterone receptor gene (PROGINS). The endometriosis group consisted of 54 patients with a diagnosis of endometriosis by laparoscopy, and the control group comprised 44 women without endometriosis. Genotypes for PROGINS polymorphisms (A1/A1, A1/A2 and A2/A2) were determined by polymerase chain reaction and analyzed on a 2% agarose gel stained with ethidium bromide. The frequency of polymorphic genotypes (A1/A2 and A2/A2) was significantly higher in patients with endometriosis (33%) than in the control group (16%). We

conclude that there is a significant correlation between PROGINS polymorphism and endometriosis.

Key words: Endometriosis; Progesterone receptor; PROGINS; PCR