

Research Article

Post-laparoscopic GnRH-agonist Therapy does not Improve Spontaneous Conception Rates of Women with Endometriosis

Terapi GnRH-agonis Post-laparoskopi tidak Meningkatkan Angka Kehamilan Spontan pada Perempuan dengan Endometriosis

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Abstract

Objective: To investigate the reproductive benefits of combining laparoscopic surgery with GnRH-agonist hormonal therapy in treating women with endometriosis.

Methods: This is a non-randomized prospective analytic study of patients with endometriosis conducted in a private hospital in Bandung during the period of January 2014 to December 2015, whom were later followed up after 12-24 months for assessment of post-surgical reproductive performance. A total of 121 patients were enrolled, 60 of which received post-surgical GnRH-agonist hormonal therapy.

Results: We discovered that 56 women (46.3%) eventually achieved spontaneous conception after surgery but upon further analysis, it was discovered that GnRH-agonist played no significant meaningful role in improving the spontaneous pregnancy rates of these patients (OR 1.539; 95% CI 0.750-3.159; p-value 0.239). Furthermore, even though there was a wide range as to when they achieved conception, those untreated with hormonal therapy tended to conceive far more quickly than those who were (5.91 ± 6.28; 8.56 ± 4.24; p-value: 0.011).

Conclusion: Post-laparoscopic GnRH-agonist administration to women with endometriosis does not significantly improve their chances of spontaneous conception. In fact, such administration seems to delay it.

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Keywords: endometriosis, GnRH-agonist, laparoscopy

Abstrak

Tujuan: Untuk menyelidiki efek reproduktif dari terapi kombinasi operasi laparoskopi dan terapi hormonal GnRH-agonis dalam manajemen perempuan dengan endometriosis.

Metode: Penelitian ini adalah studi analitik prospektif tidak teracak pada pasien-pasien dari sebuah rumah sakit swasta di Bandung dari tahun 2014-2015 yang menderita endometriosis dan kemudian diikuti hingga 12-24 bulan untuk mengevaluasi performa reproduktif post-operatif mereka. Terdapat 121 pasien pada penelitian ini, 60 di antaranya mendapatkan terapi hormonal GnRH-agonis post-operatif.

Hasil: Penelitian ini menemukan bahwa 56 pasien (46,3%) berhasil hamil setelah dilakukan laparoskopi tetapi disimpulkan bahwa GnRH-agonis tidak memainkan peranan signifikan dalam meningkatkan angka kehamilan dari pasien-pasien ini (OR 1,539; 95% CI 0,750-3,159; p 0,239). Selain itu, meskipun terdapat variasi cukup luas terkait kapan pasien-pasien ini berhasil hamil, mereka yang tidak mendapatkan GnRH-agonis cenderung berhasil hamil lebih cepat dibandingkan mereka yang dapat (5,91 ± 6,28; 8,56 ± 4,24; p 0,011).

Kesimpulan: Pemberian GnRH-agonis post-laparoskopi pada pasien-pasien dengan endometriosis tidak meningkatkan kemungkinan mereka hamil dan sebaliknya, cenderung menunda kehamilan.

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Kata kunci: endometriosis, GnRH-agonis, laparoskopi

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INTRODUCTION

Endometriosis is a gynecologic disease that stems from the presence of uterine endometrial tissue (both glands and stroma) outside the uterine cavity.¹ These ectopic tissues are often planted on the pelvic viscera, e.g. ovaries, and the peritoneum. It is a disease of primarily women of reproductive age. While studies vary on its prevalence in the general population, it is estimated that endome-

triosis adversely affects 1 in every 10 women.² Endometriosis acquaints itself with numerous risk factors, e.g. infertility, early age at menarche, shorter menstrual cycle length, history of endometriosis in 1st degree relative and diet high in fat and alcohol.¹ Nevertheless, there are numerous protective factors against endometriosis, e.g. use of oral contraceptive drugs, increased BMI, exercise and diet high in vegetables and fruits.^{1,2}