Latin American Journal of Pharmacy
(formerly *Acta Farmacéutica Bonaerense*)
Lat. Am. J. Pharm. **42** (6): 1313-20 (2023)

Received: March 8, 2023
Accepted: April 9, 2023

Clinical study on the Comparative Treatment of Primary Dysmenorrhea by Traditional Chinese Medicine (Dingkundan Pills) and Marvelon Tablets

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SUMMARY. **This study was planned to observe the clinical efficacy and safety of two different drugs (Dingkundan and Marvelon) for primary dysmenorrhea.: A total of 201 patients with primary dysmenorrhea were divided into placebo (n = 65), Dingkundan (n = 73) and Marvelon (n = 63) groups by random number table. Patients' baseline data were collected and the pain was evaluated using visual analogue scales (VAS) before treatment, medication for one, two, and three months, as well as one and two months after drug withdrawal. Bilateral uterine artery blood flow (RI, PI, S/D) was detected by ultrasonography and serum parameters, including prostaglandins (PGF2α, PGE2), arginine vasopressin (AVP), oxytocin (OT), endothelin (ET), β-endorphin (β-EP) and nitric oxide (NO) were determined before treatment as well as medication for three months. The patients' baseline data, VAS scores, uterine artery blood flow and serum parameters were comparable among the three groups before treatment. Compared with the placebo group, VAS, serum parameters including PGF2α, PGE2, ET, OT and AVP, as well as bilateral uterine artery blood flow significantly decreased, but β-EP significantly increased in Dingkundan and Marvelon groups. The clinical efficacy of Dingkundan on primary dysmenorrhea is similar to that of Marvelon.**

RESUMEN. Este estudio se planeó para observar la eficacia clínica y la seguridad de dos medicamentos diferentes (Dingkundan y Marvelon) para la dismenorrea primaria.: Un total de 201 pacientes con dismenorrea primaria se dividieron en placebo (n = 65), Dingkundan (n = 73) y Marvelon (n = 63) grupos por tabla de números aleatorios. Se recogieron los datos basales de los pacientes y se evaluó el dolor mediante escalas analógicas visuales (EVA) antes del tratamiento, medicación durante uno, dos y tres meses, así como uno y dos meses después de la retirada del fármaco. El flujo sanguíneo de la arteria uterina bilateral (RI, PI, S/D) se detectó mediante ultrasonografía y parámetros séricos, incluidas prostaglandinas (PGF2α, PGE2), arginina vasopresina (AVP), oxitocina (OT), endotelina (ET), β-endorfina (β-EP) y óxido nítrico (NO) se determinaron antes del tratamiento y la medicación durante tres meses. Los datos de referencia de los pacientes, las puntuaciones de la EVA, el flujo sanguíneo de la arteria uterina y los parámetros séricos fueron comparables entre los tres grupos antes del tratamiento. En comparación con el grupo de placebo, VAS, los parámetros séricos que incluyen PGF2α, PGE2, ET, OT y AVP, así como el flujo sanguíneo de la arteria uterina bilateral, disminuyeron significativamente, pero β-EP aumentó significativamente en los grupos Dingkundan y Marvelon. La eficacia clínica de Dingkundan en la dismenorrea primaria es similar a la de Marvelon.

KEY WORDS: dingkundan, endorphin, oral contraceptives, primary dysmenorrhea, prostaglandin, uterine artery blood flow parameters, visual analogue scales.

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ISSN 0326 2383 (printed ed.)
ISSN 2362-3853 (on line ed.)