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BRIEF COMMUNICATION

Fenoverine vs. mefenamic acid in the treatment of primary dysmenorrhea

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KEYWORDS
Dysmenorrhea;
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Mefenamic acid is a nonsteroidal anti-inflammatory drug and a prostaglandin inhibitor useful in the treatment of patients with primary dysmenorrhea [1], and fenoverine is a calcium modulator prescribed as an antispasmodic [2]. The goal of this study was to compare the effectiveness of fenoverine and mefenamic in the treatment of women having primary dysmenorrhea, with pain interfering with daily activities.

An open-label, prospective, randomized, cross-over study was conducted in 51 Mexican women aged 18 years and older who had primary dysmenorrhea, regular menstrual cycles, and pain scores of 5 or higher on an analog visual scale (AVS). The study was conducted over 3 menstrual cycles as follows: (A) At cycle 1 (baseline cycle) pain severity was measured on the first day of menstruation and the 4 following days, accompanying symptoms were noted as well as pain interference with daily activities, and an analgesic was administered; (B) at cycle 2, on the 5 corresponding days, the women were randomly assigned to take 200 mg of fenoverine (Spasmopriv; Senosiain Laboratories, Mexico) every 12 h or 500 mg of mefenamic acid (Namifen;

Table 1 Comparison of the decrease in menstrual pain obtained with mefenamic acid and fenoverine

Cycle day	Treatment			
	None (baseline cycle)	Mefenamic acid	Fenoverine	*P* value
1	8.0 ± 1.5	6.1 ± 2.8	6.9 ± 2.5	0.001
2	7.8 ± 1.7	5.3 ± 2.6	5.9 ± 2.5	0.001
3	5.8 ± 2.6	3.8 ± 2.8	3.8 ± 2.7	0.001
4	4.2 ± 2.8	2.6 ± 2.2	2.8 ± 2.4	0.001
5	3.5 ± 2.9	1.9 ± 1.6	1.9 ± 1.8	0.001

The decrease was measured daily for 5 days on an analog visual scale where 1 corresponded to no pain, 2 to partial relief, and 3 to no relief; values are given as mean ± SD.

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Table 2 Proportion of participants who had menstrual pain alleviation according to the drug they received

Day of menstruation	Alleviation					
	Mefenamic acid			Fenoverine		
	Yes	No	*P* value	Yes	No	*P* value
1	70.6%	29.4%	0.005	52.9%	47.1%	NS
2	84.3%	15.7%	0.00	76.5%	23.5%	0.0001
3	92.2%	7.8%	0.00	90.2%	9.8%	0.00
4	97.8%	2.2%	0.00	91.7%	8.3%	0.00
5	97.4%	2.6%	0.00	72.3%	27.7%	NS

Abbreviation: NS, not significant.

Novag Infancia Laboratiries, Mexico) every 8h; and (C) at cycle 3 the participants switched treatments.

Pain severity was assessed on the same 5days of the cycle using an analog visual scale (AVS) where 1 meant complete alleviation of pain; 2, partial alleviation; and 3, no relief. Treatment was considered effective when there was a decrease of at least 2 points on the AVS.

Pain interference with daily activities was assessed as time in minutes to pain relief following drug administration.

The study protocol was authorized by the institutional bioethics committee, and all participants signed an informed consent form.

The participants' mean ± SD age was 21.8 ± 3.0years. Compared with baseline, pain decrease was significant with both mefenamic and fenoverine ($P<0.001$ for both). No differences were found among the groups (Table 1).

Overall, mefenamic acid showed better results than fenoverine in the perception of pain relief; however, on day 1 of the cycle the efficacy of fenoverine was significantly greater (Table 2).

At the baseline cycle, between 20% and 50% of the participants reported that pain interfered to some degree with their daily activities, and this interference decreased with both treatments. Pain relief was achieved with mefenamic acid and fenoverine in 62.3 and 82.4min, respectively ($P=0.05$).

Mefenamic acid and fenoverine showed efficacy in 88.6% and 76.6% of participants, respectively, with a pain reduction of 4.2 points and 4.9 points on the AVS; these results are superior to those reported in previous studies [3,4].

It can be concluded that fenoverine is as effective as mefenamic acid, and therefore an option for the treatment of dysmenorrhea.

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