



Pregabalin efficacy in treatment of chronic pain in patients with knee OA

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Background

Modern methods of treatment of osteoarthritis have mainly anti-inflammatory action. A few studies show the effectiveness of centrally acting drugs for chronic pain in osteoarthritis of the knee (OAK).

Objective

To study the efficacy of Pregabalin in treatment of chronic pain in patients with knee OA.

Materials and methods

The study involved 60 female patients with knee OA having neuropathic pain component (NPC; DN4>4). Mean age 59,82±4,46 years (min 49, max 65 years). All patients were randomly divided into two groups to be treated with 2 therapeutic regimens: aceclofenac + pregabalin (Group I) or aceclofenac (Group II) for 5 weeks (3 visits). All patients were subjected to clinical and neurological examination, total WOMAC score assessment, verification of neuropathic pain (NP) (questionnaire DN4 and Pain DETECT), and VAS pain intensity assessment at rest.

Figure 1. On-treatment WOMAC score dynamics

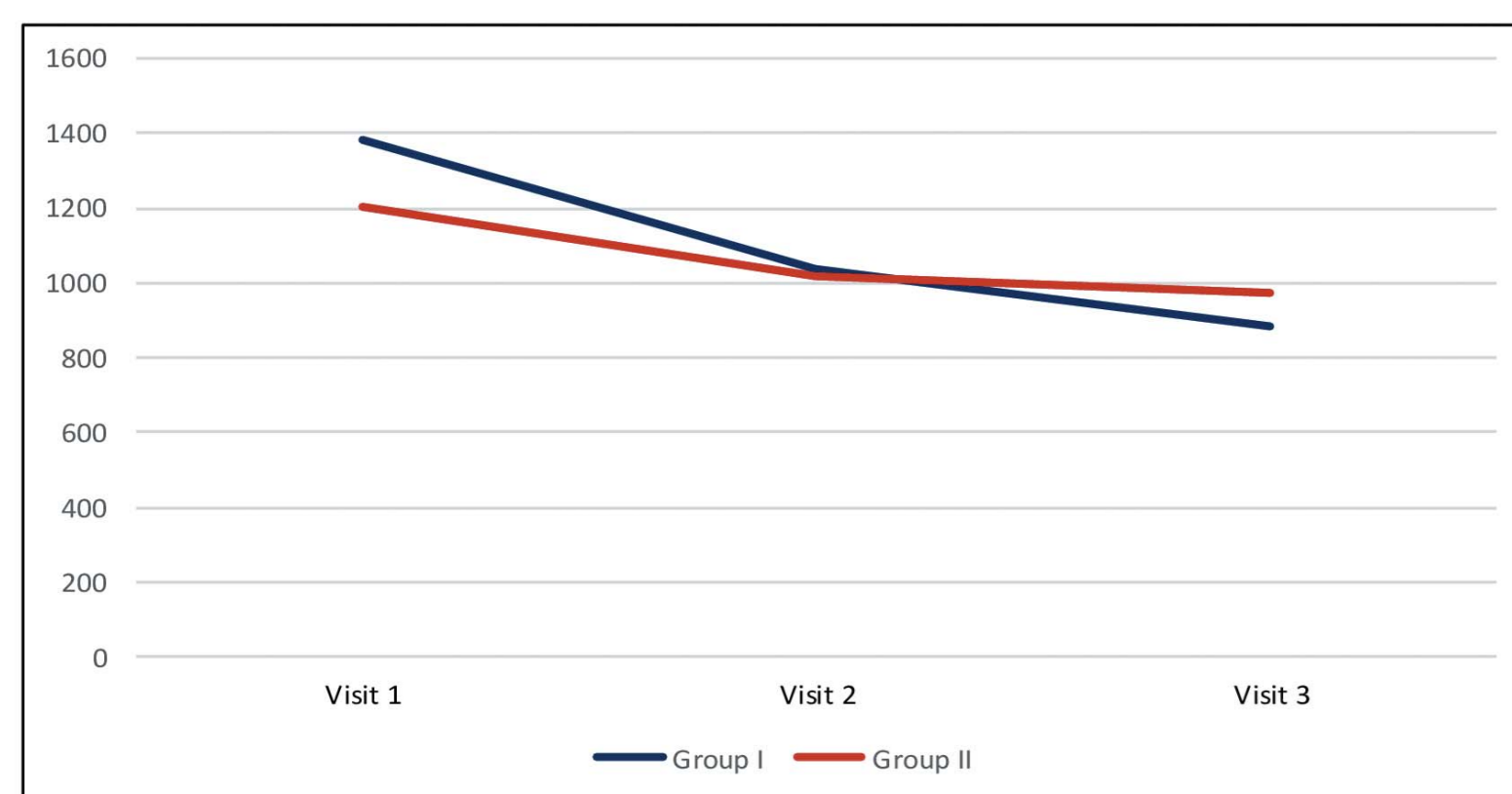


Figure 2. On-treatment VAS pain intensity dynamics on movement

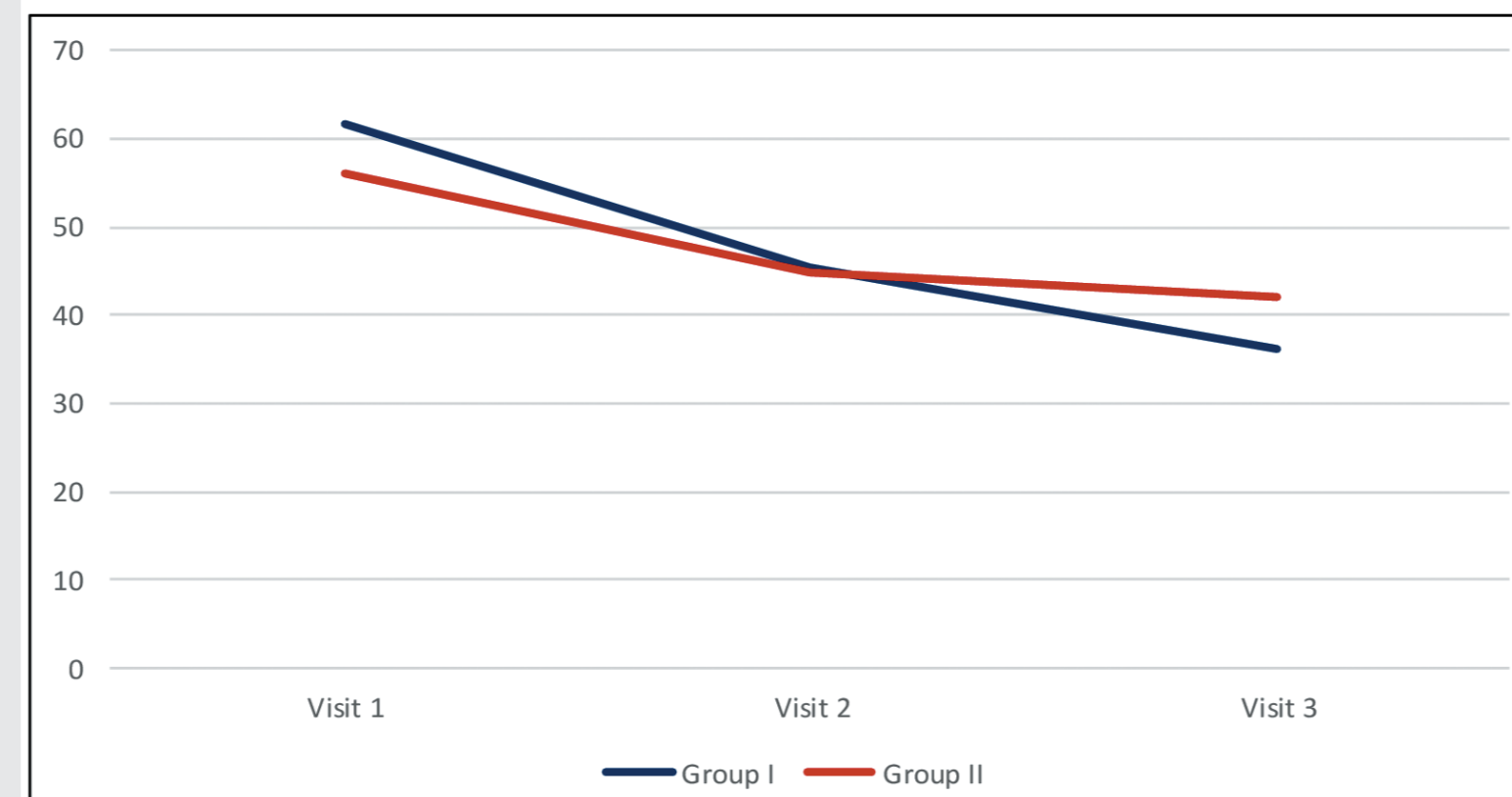


Figure 3. DN4 questionnaire score dynamics

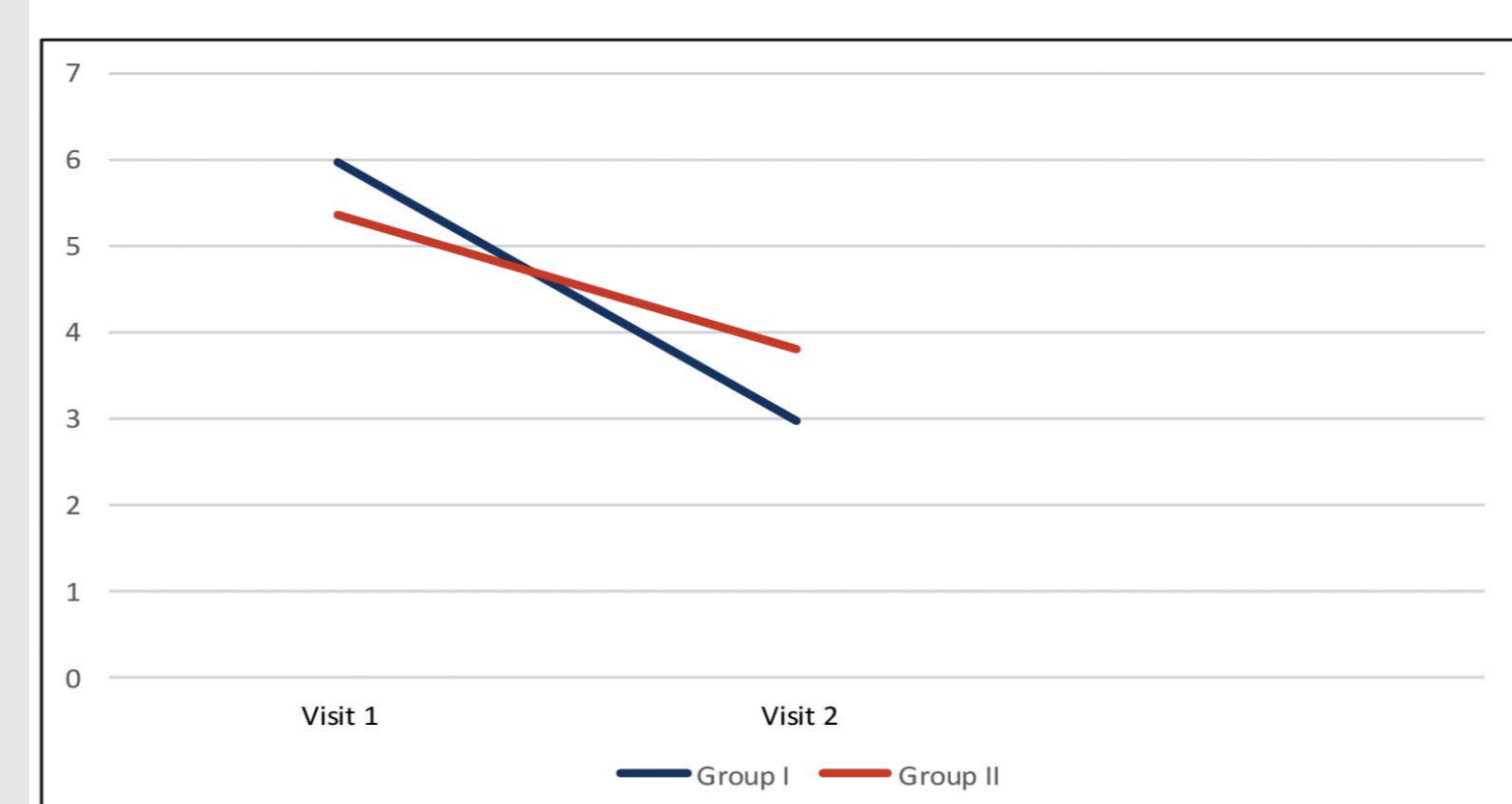
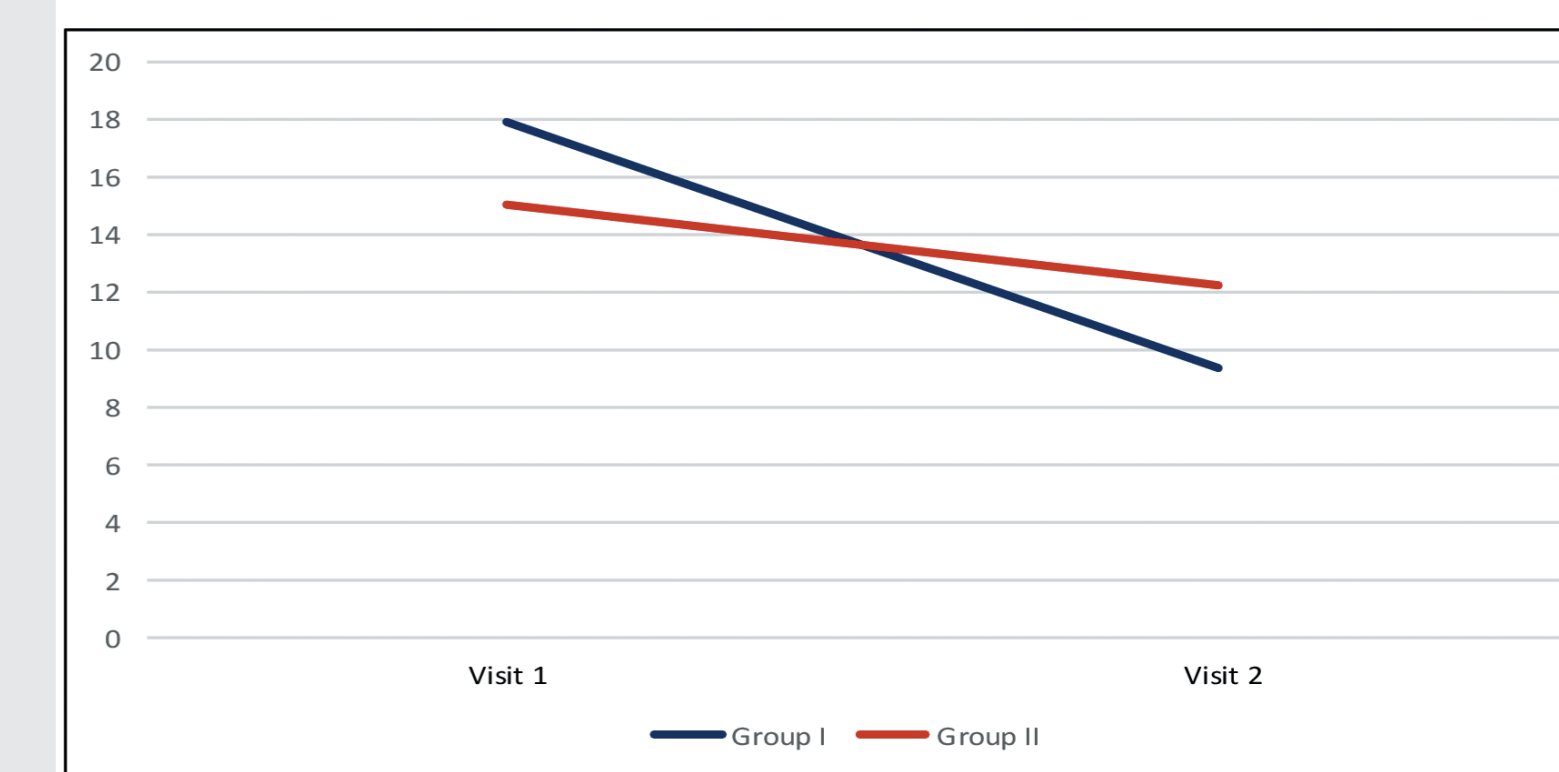


Figure 4. Pain DETECT score dynamics



Results

The therapy was successful in both groups with respect to WOMAC score [Fig 1] (Group I – 1385,30±365,83 vs 1034,70±402,37 vs 886,64±456,31; Group II – 1206,04±358,72 vs 1016,45±428,52 vs 976,55±408,02 respectively, p=0,01). Significant reduction of pain intensity at rest was documented in both groups [Fig 2] (Group I 61,60±14,91 vs 45,34±16,14 vs 36,24±18,09; Group II 56,07±22,58 vs 44,86±18,68 and vs of 41,96±24,04, p=0,01, respectively). Therapeutic regimens in both groups had positive impact on NPC based on DN4 questionnaire and Pain DETECT scores. However, a combination of a NSAID with anticonvulsants agent (pregabalin) resulted in a more pronounced effect. Changes in DN4 values in Group I (visit1/visit3) were: 5,97±1,24/2,97±1,83 p=0,001; and in Pain DETECT values – 17,93±3,87/9,34±6,18, p=0,001; while in Group II DN4 scores were 5,35±0,93/3,79±2,29, p=0,001; and Pain DETECT – 15,03±5,26/12,24±6,29 p=0,02. [Fig. 3–4].

Conclusion

A NSAID + Pregabalin combination in patients with knee OA and NP allows not only effectively reduce pain intensity, but also improves patients' functional activity and, therefore, the quality of life.