Effects of duloxetine hydrochloride on chronic lower back pain

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Background Context:

Antidepressants are recommended pharmaceutical drugs according to lower back pain treatment guidelines.

However, there are no reports on the clinical outcomes of duloxetine hydrochloride to date since its approval in Japan in March 2016.

Purpose:

The purpose of this study is
to examine the efficacy of duloxetine hydrochloride
in patients with chronic lower back pain by prescribing it to them.

Study Design/Setting:

Retrospective study using patient medical charts.

Patient Sample:

The subjects comprised 82 patients

(28 men, 54 women, mean age: 74 years)

The dose of duloxetine was increased from 20 mg/day and increase to the target dose of 60 mg/day.

Outcome Measure:

Japanese Orthopaedic Association Back Pain Evaluation Questionnaire (JOABPEQ) .

2 weeks, 1 month, 2 months and 3 months after initiating treatment

baseline pain
lumbar spine function
walking ability
social life
mental health

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Results:

82Patients

14 patients(17%)
due to initial adverse events such as dysphoria and nausea

68 Patients

8 patients(11.8%)
referred to a nearby clinic due to the patient's desire to be followed up

60 Patients

9 patients (13.2%)
no-show on the appointment date

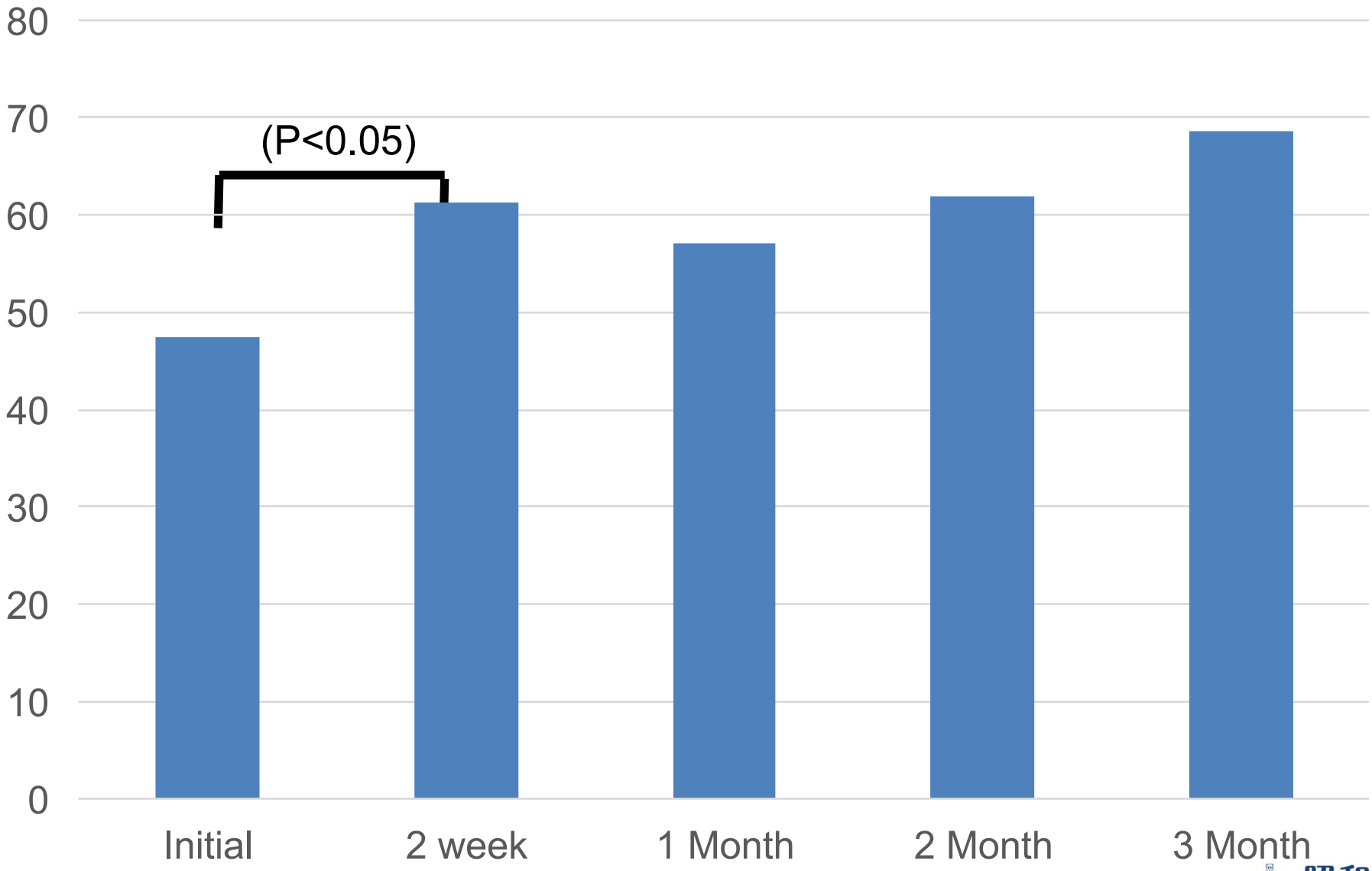
51 Patients

4 patients(5.9%)
did not consent to having their scores used in this study

47 Patients

47 of 68 (69%)
continuing treatment who were followed up for 3 months

Results: Pain Score



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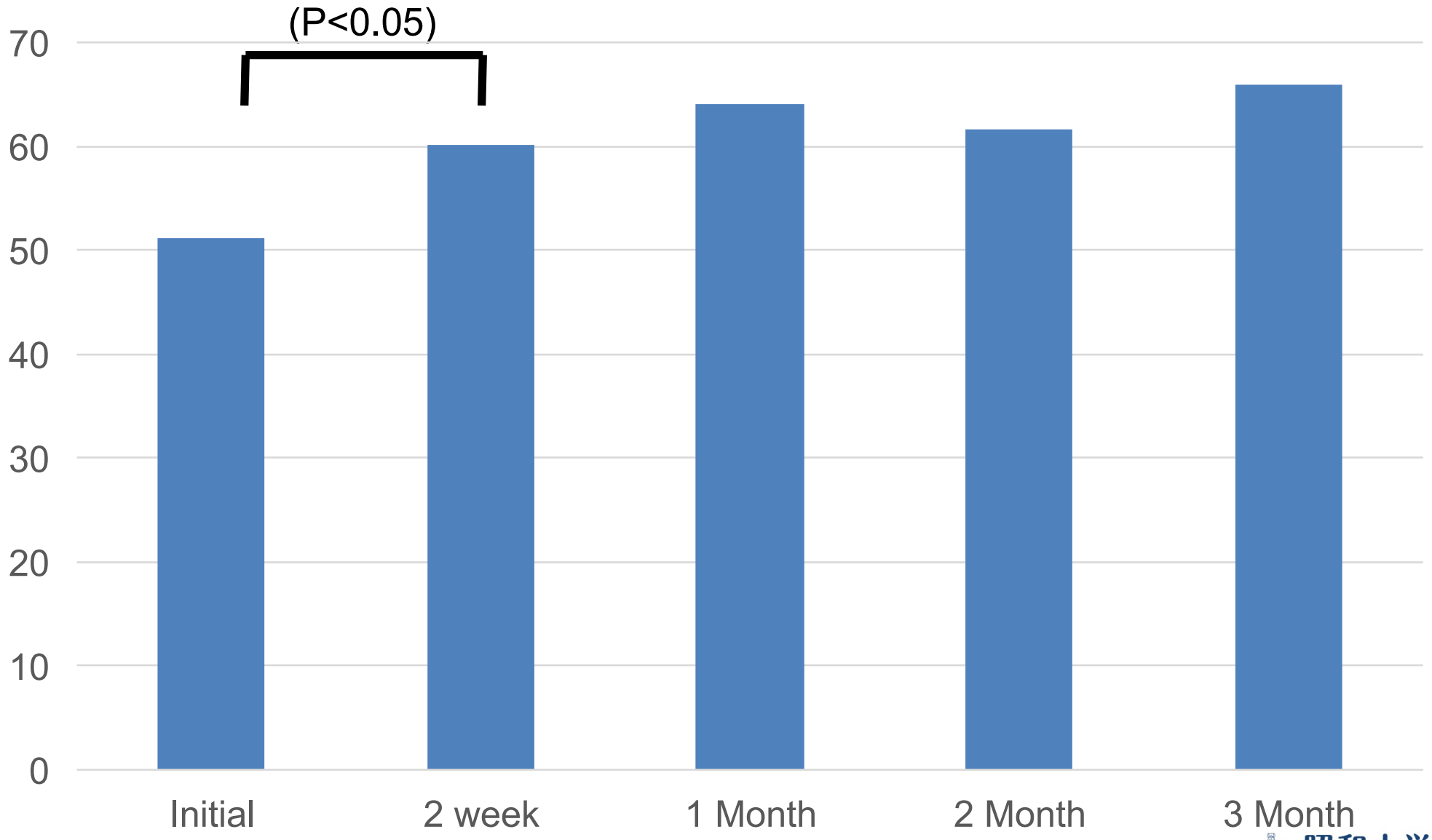
Results: lumbar spine function



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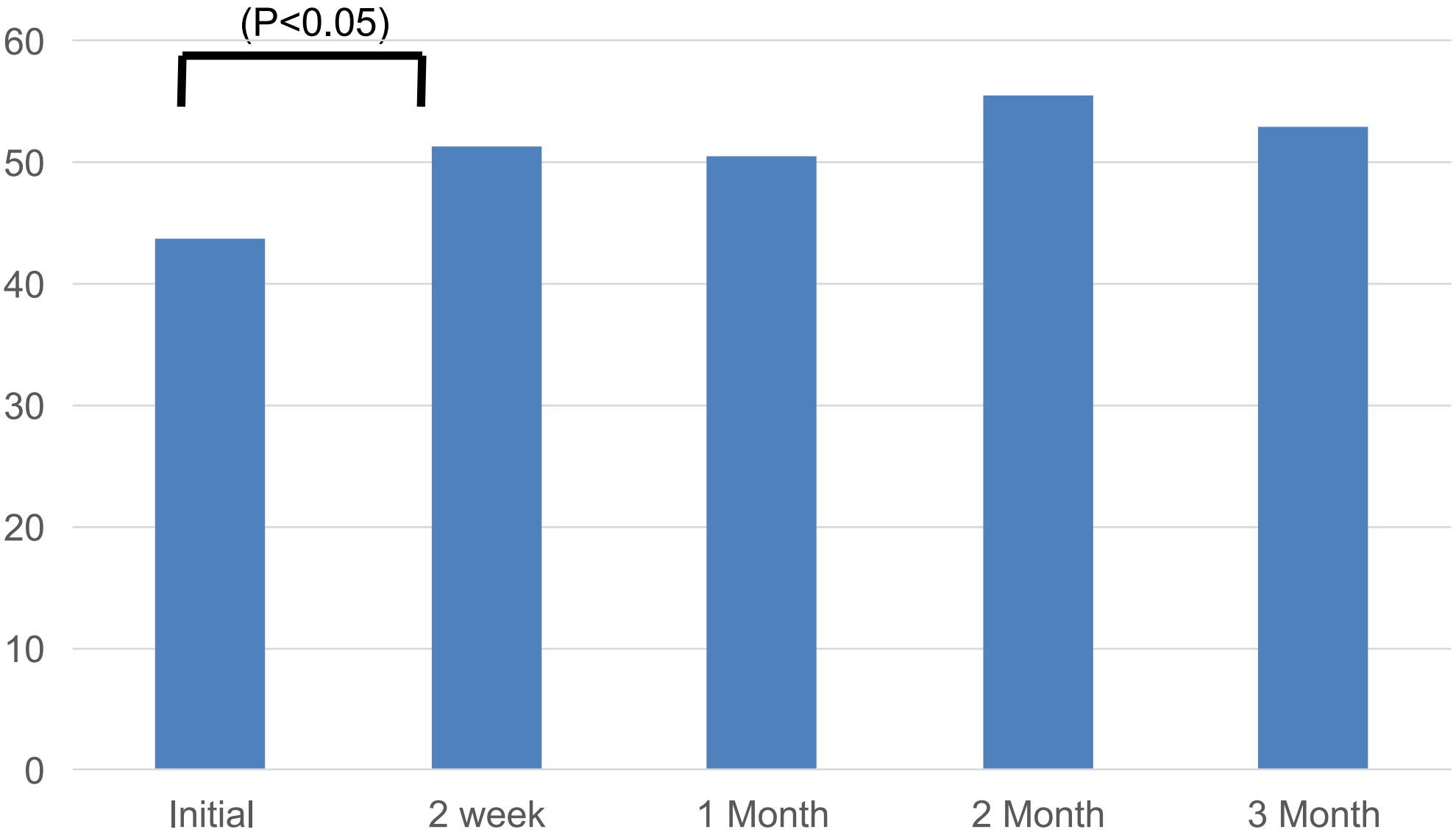
Results: social life



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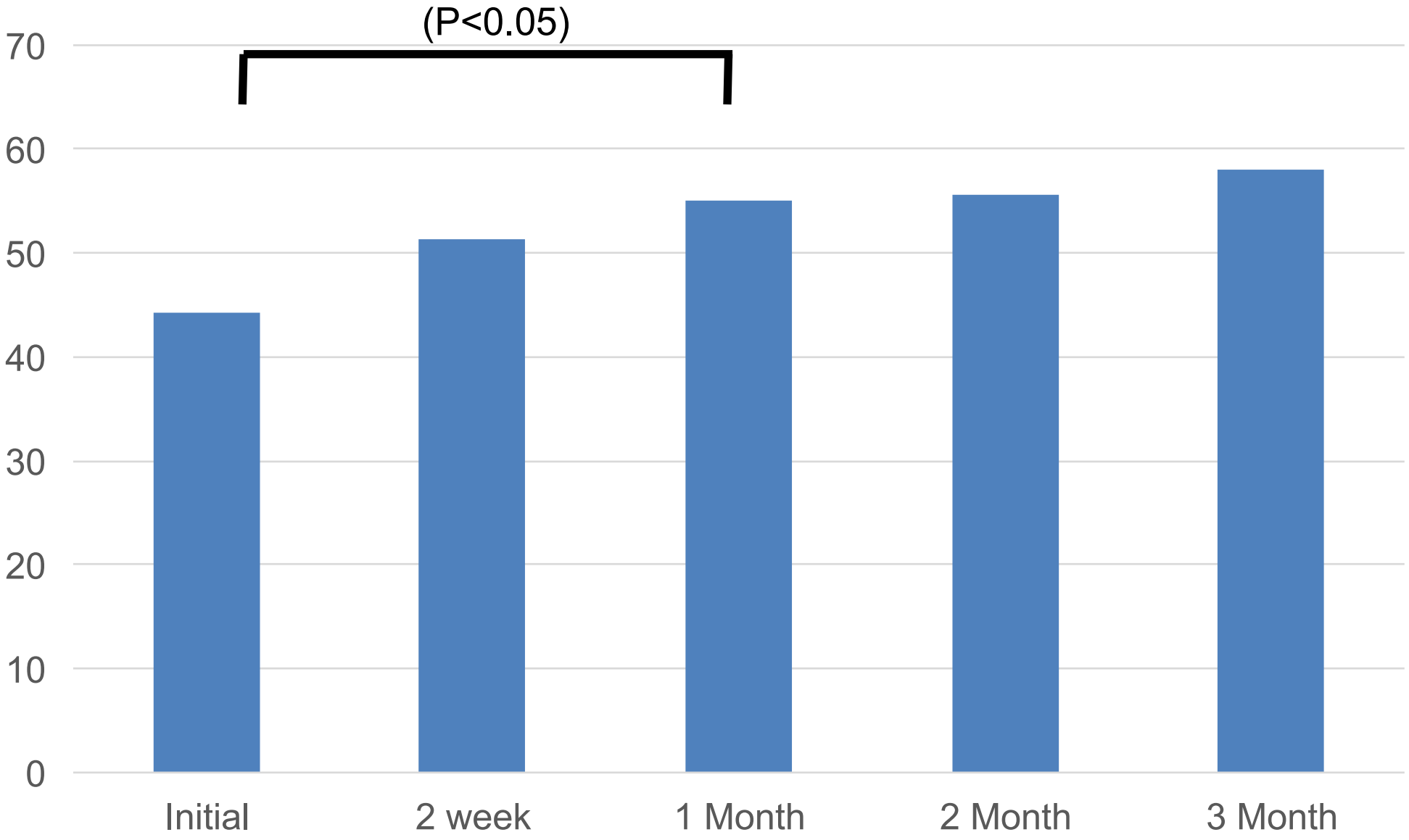
Results: Walking



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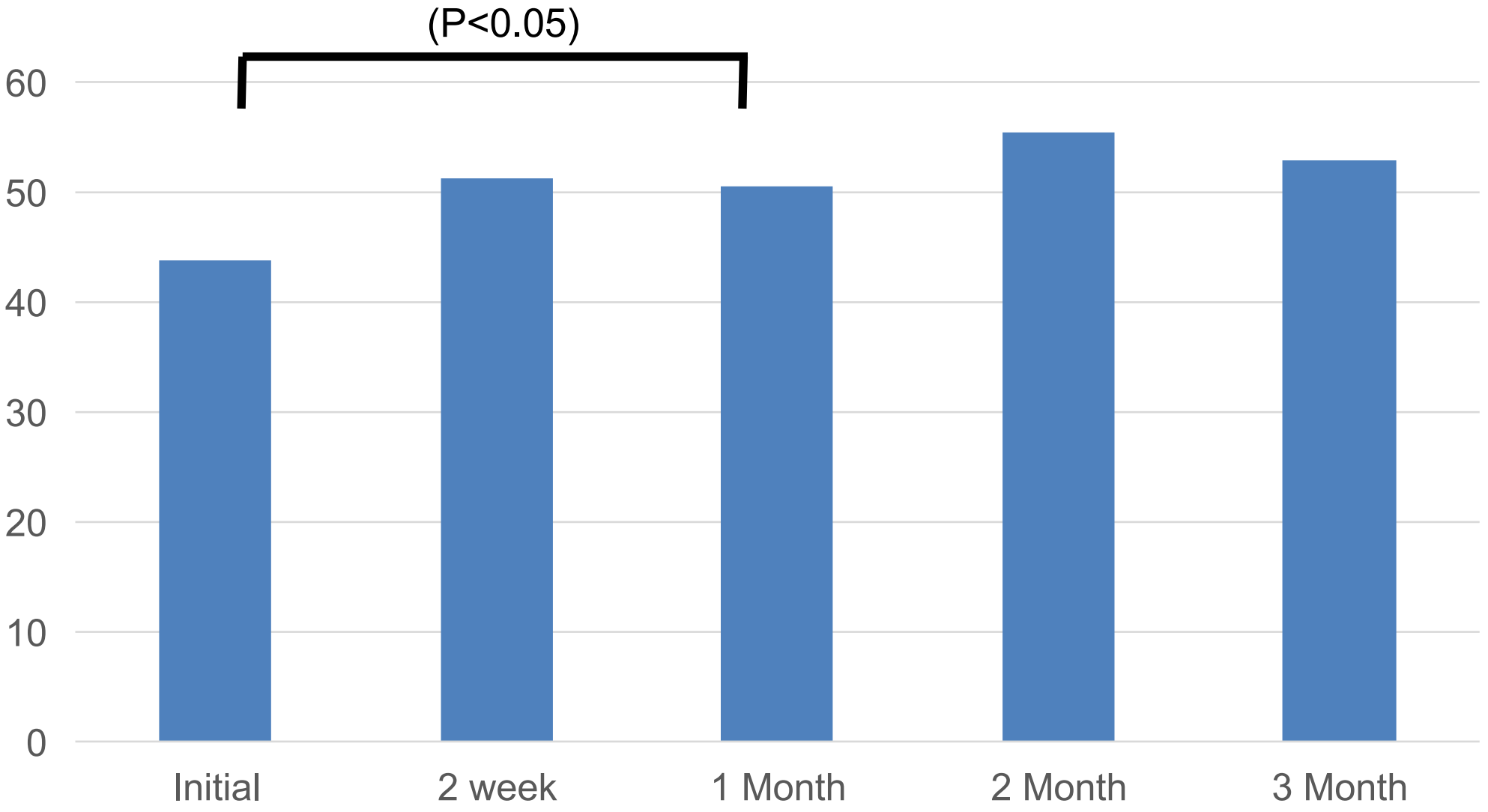
Results: mental health



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Discussion:

Early pain reduction may predict improvements quality of life

Tsuji T et al : J Pain Res.10:2157-2168.2017

Duloxetine-treated patients reported significantly
greater improvements and some health outcomes

Skljarevski V et al : J Pain.11:1282-90.2010

Our survey did not include QOL study.
➡Future investigations are required

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Discussion:

15.2% of duloxetine treatment discontinued because of adverse events

Skljarevski V et al.J Pain.11:1282-90. 2010

Duloxetine treatment was considered to be safe and well tolerated with less than 20 percent discontinuation due to adverse events.

David J.Goldstein et al. Pain. 166.109-118.2005

Our Survey includes 17% discontinued cases due to adverse events

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Conclusions:

Although there was a high dropout rate for duloxetine hydrochloride, it was effective for the treatment of chronic lower back pain.

Future investigations are required on cases that discontinue treatment.