P210

Joint symptoms in continuation and stop groups after 5 years of anastrozole : NSAS-BC 05

Comprehensive Support Project

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Abstract

To compare joint symptoms (pain and stiffness) at baseline (BL) and after 1 year(1Y) when the use of anastrozole is extended for 5 years after the completion of 5-year postoperative endocrine therapy in patients with postmenopausal breast cancer.

Methods

Patients registered in NSAS-BC 05 were asked to validated validated health-related quality of life (HRQOL) instruments, which include joint symptoms (pain and stiffness), at baseline and at 1 year.

The subjects were 290 patients at 64 institutions from whom HRQOL surveys were collected at BL and at 1Y.

There were 150 patients in the anastrozole continuation group (CNT group) and 140 patients in the stop group (STP group).

The mean age was 64, and body mass index was below 25 in 75.5% of patients.

Results

Concerning joint pain, daily activities were affected due to severe pain in 3.1% at BL and 4.8% at 1Y in the CNT group, and in 3.1% at BL and 1.5% at 1Y in the STP group, showing no statistical difference.

Assessment of the location of the joint pain showed an increased trend for elbow pain in both groups (p=0.04).

Daily activities were affected due to stiffness in 0.6% at BL and 2.0% at 1Y in the CNT group, and in 1.9% at BL and 0% at 1Y in the STP group, showing no statistical difference.

Assessment by location showed a statistically significant difference for the foot (p=0.03), thumb (p=0.01) and metacarpophalangeal joints (MCP) (p=0.04).

Conclusion

Only joint symptoms during the first year after the start of this study are examined here, but the anticipated worsening of symptoms due to continuation of anastrozole and alleviation of symptoms due to stopping of anastrozole were not observed.

Study Design: UMIN000000818

Postmenopausal women with breast cancer who completed 5-year treatment with anastrozole after surgery

(Including patients who received a total of 5-year treatment consisting of tamoxifen for 2 to 3 years, followed by anastrozole)

Randomization

Stratification Factors
- Category of Adjuvant ET
- Previous Chemotherapy Yes/No
- Lymph node status
- Institution

STOP n=849
No treatment for 5 years
(no additional medication)

CONTINUE n=848
Continuation of anastrozole
(1 mg/day) for 5 years

Study status: Active, Not recruiting
Efficacy analysis to be conducted in 2018.

QOL assessment
Subjects: Patients registered from Nov. 2007 to Nov. 2009 n=290

Study Endpoints

- Primary Endpoint
  - Disease-free survival(DFS)
    Estimated sample size for DFS as primary endpoint:
    1697 pts in total
- Secondary Endpoints
  - Overall survival(OS)
  - Distant-disease-free survival(DDFS)
  - Adverse events, HR-QOL, Cost & benefits
- Other endpoints
  - Bone mineral density
  - Joint symptoms

Introduction

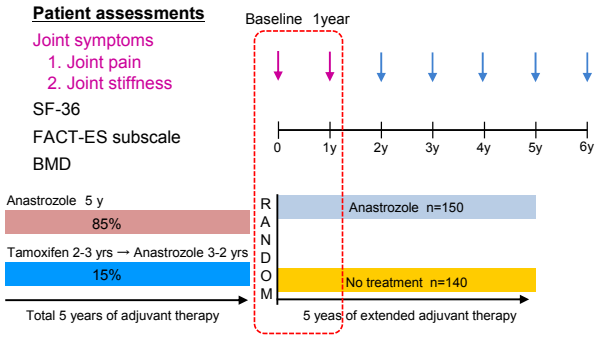
Presently, 5-year postoperative endocrine therapy is standard for postmenopausal ER-positive breast cancer, but endocrine therapy beyond 5 years is regarded as effective if there is a switch from tamoxifen or extended therapy.
It is also known that patients with ER-positive breast cancer have a certain frequency of recurrence even after 5 years.
Therefore, extension of postoperative endocrine therapy for postmenopausal ER-positive breast cancer to 10 years is being attempted.
In this study, preventive effect against late recurrence and safety of extending anastrozole a further 5 years were evaluated in patients who had completed 5-year postoperative endocrine therapy.
Case registration ended in November 2012, and 1697 patients were registered.
The primary endpoint will be evaluated in 2018.

This study was limited to about 300 patients who were registered from the start of case registration in November 2007 until November 2009, and QOL assessment using patient questionnaires is ongoing.
Here we report the results compiled on joint symptoms (baseline and after 1 year) which were surveyed using patient questionnaires for the subjects of QOL assessment.

QOL Assessment Schedule

Patient assessments
Joint symptoms
1. Joint pain
2. Joint stiffness

SF-36
FACT-ES subscale
BMD



Survey Items of Self-administered Questionnaires

Joint symptoms
1. Joint pain
2. Joint stiffness

Short Form 36-item Health Survey (SF-36)

FACT-ES sub-scale

Results

Patient Background n=290

At time of registration	Mean	Min	Max
Age	64.6	47	80
Height (cm)	153.1	131	168
Body weight (Kg)	54.5	37	91
BMI (kg/m^2)	23.2	16.4	37.3
Previous adjuvant therapy period (days)	1810	1719	1902

Patient backgrounds are similar in the stop group and continuation group, and there were no statistically significant differences between the two groups.

Joint Pain

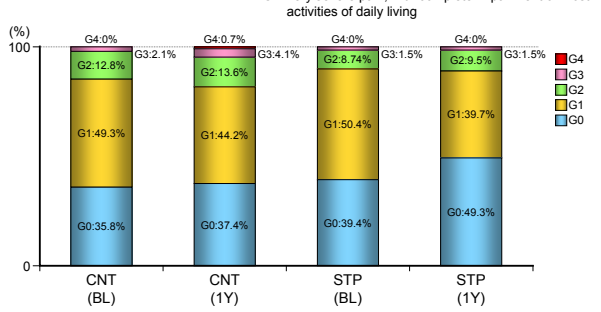
When joint pain was divided into 5 grades, there was strong pain affecting activities of daily living (Grade 3 or above) in 3.1% at BL and 4.8% at 1Y in the CNT group, in 1.8% at BL and 1.5% at 1Y in the STP group, and these showed no statistically significant difference (p=0.75).

The most common location of joint pain was in the order of knee, hand, wrist, shoulder, foot and elbow, regardless of the group or time of assessment.

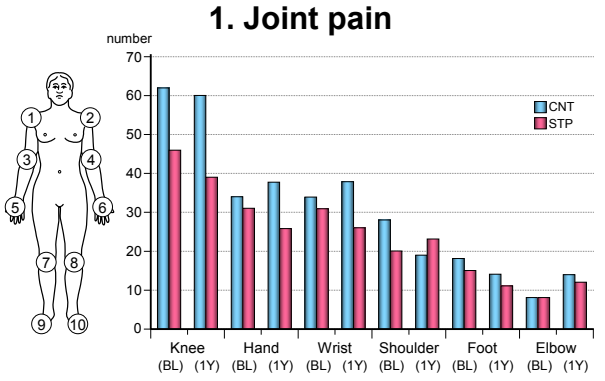
1. Joint pain

Patients with pain
Baseline : n=174/290 (60%)
1Y : n=165/290 (56.9%)

G0: no pain
G1: mild pain
G2: severe pain, not affecting activities of daily living
G3: severe pain, affecting activities of daily living
G4: very severe pain, with complete impairment of most activities of daily living



1. Joint pain



Joint stiffness

When stiffness was divided into 5 grades, stiffness affected activities of daily living (Grade 3 or above) in 0.6% at BL and 2% at 1Y in the CNT group, and in 2% at BL and 0% at 1Y in the STP group. There was no Grade 4. There was no statistically significant difference (p=0.14).

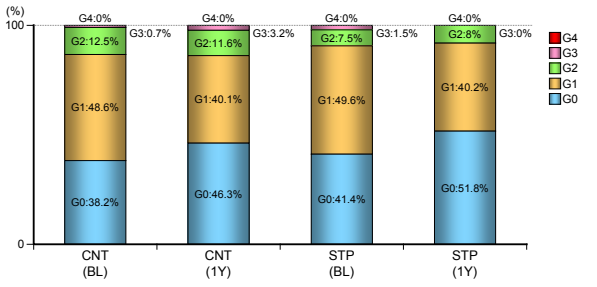
The most common location of joint stiffness was in the order of hand, knee, foot, wrist and elbow.
In the hand, PIP, thumb and MCP were particularly often reported.

Patients were most conscious of stiffness on getting up, in the morning, and when trying to move the joint, but it mostly got better with time.

2. Joint stiffness

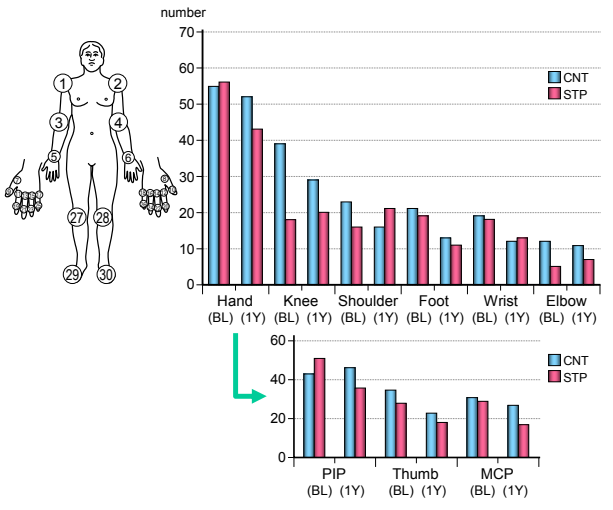
Patients with joint stiffness:
Baseline : n=157/290 (54.1%)
1Y : n=140/290 (48.3%)

G0: no stiffness
G1: mild stiffness
G2: severe stiffness, not affecting activities of daily living
G3: severe stiffness, affecting activities of daily living
G4: very severe stiffness, completely disturbing activities of daily living



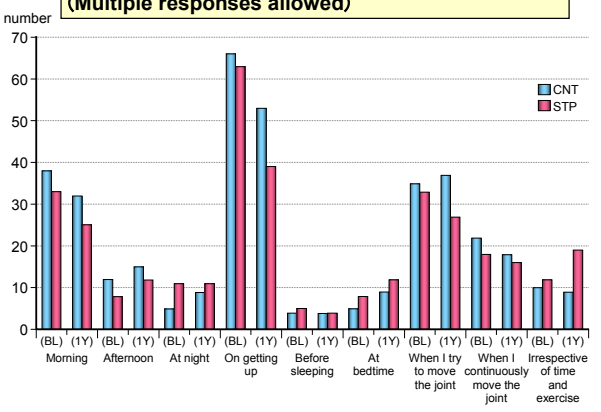
There was no G4.

2. Joint stiffness



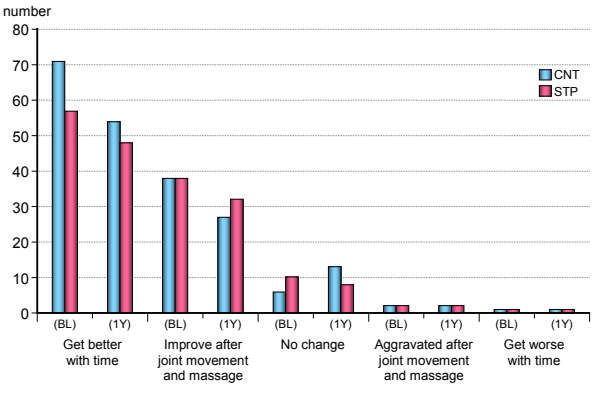
2. Joint stiffness

Question 1 : When does stiffness occur in a day? (Multiple responses allowed)



2. Joint stiffness

Question 2 : On days when you have joint stiffness, do the symptoms change? (Multiple responses allowed)



Conclusions

Although it was thought that continuation of anastrozole could worsen joint pain and stiffness, no certain trend was observed.

Only joint symptoms in the first year after the start of the study have been examined here, but the anticipated worsening of symptoms due to continuing anastrozole and alleviation of symptoms due to stopping anastrozole were not observed.

We plan to continue to evaluate these changes at 1-year intervals.

Study Group
National Surgical Adjuvant Study of Breast Cancer

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