Resolution of Upper Gastrointestinal Symptoms Associated With Chronic Non-Steroidal Anti-Inflammatory Drug Therapy has a Positive Impact on Patient-Reported Productivity

Peter Wahlqvist, Klas Bergenheim, Göran Långström, Jørgen Nasdal

1Clinical Science, AstraZeneca, Mölndal, Sweden

CONCLUSION
- Results from this exploratory study indicate that successful treatment of upper gastrointestinal symptoms in chronic NSAID users has a significantly positive impact on their ability to work and carry out daily activities.

1. INTRODUCTION
- It is estimated that 20–35% of patients using NSAIDs, including COX-2 selective NSAIDs, suffer from upper GI symptoms.1,2
- A recent international, placebo-controlled clinical study (n=556) demonstrated the efficacy of 4 weeks’ esomeprazole treatment in relieving upper GI symptoms (defined as upper abdominal pain, discomfort or burning) associated with continuous COX-2-selective and non-selective NSAID use in a non-icteric population.3

2. AIM
- To explore the impact of upper GI symptoms, in chronic NSAID users, on the ability to work and carry out daily activities.

3. METHODS
- A productivity questionnaire was given to all the Swedish patients (n=77) participating in the clinical study.1 Responders and non-responders after 2 or 4 weeks’ treatment were identified by use of upper GI symptom diaries (primary measure in clinical study). Responders were defined as having a reduction in symptoms to no more than 2 days with mild symptoms, on a 7-grade Likert scale, during 7 consecutive days.
- Results were calculated for responders and non-responders irrespective of treatment. Other patient-reported instruments in the study included the Quality of Life in Reflux and Dyspepsia (QOLRAD) questionnaire4 and the Gastrointestinal Symptom Rating Scale (GSRS).5

Productivity questionnaire
- A Work Productivity and Activity Impairment (WPAI) questionnaire, previously used and validated in patients with gastroesophageal reflux disease,6 was modified to assess the impact of upper GI symptoms on productivity during the previous week. The questionnaire contains three questions relating to work time: hours absent from work due to upper GI symptoms; hours absent from work due to other reasons; and hours actually worked.
- There are two questions regarding reduced productivity: one relates to the percentage by which productivity at work is reduced due to upper GI symptoms and the other to the percentage by which productivity is reduced while performing regular daily activities other than work.

Quality of Life in Reflux and Dyspepsia
- QOLRAD is a disease-specific questionnaire with questions assessing the impact of upper GI symptoms on quality of life (QoL) during the previous week, in which 25 items combine into 5 dimensions: Sleep disturbance, Food and drink problems, Emotional distress, Vitality, and Physical/social functioning.

Gastrointestinal Symptom Rating Scale
- GSRS is a scale for assessing GI symptoms during the previous week, in which 15 items combine into 5 dimensions: Indigestion, Abdominal pain, Reflux, Diarrhoea, and Constipation.

4. RESULTS
- Evaluatable productivity data were obtained from 61 patients (mean age 54 [range 20–78] years; 41 responders, 20 non-responders) of which 27 patients (44%; 14 responders, 13 non-responders) were employed.
- Table 1 shows that before the start of treatment (baseline), patients reported an average of 0.4 hours absence from work (per patient, per week); a reduction in work productivity of 13%; and a reduction in productivity in daily activities of 26%, because of upper GI symptoms.
- The mean differences between responders and non-responders after treatment (follow-up) were 0.7 hours for absence from work, 12 percentage units for reduced work productivity and 16 percentage units for reduced productivity in activities.
- On a weekly basis, therefore, results imply that treatment success is associated with an avoidable loss of work productivity of around 4.6 hours per patient employed, of which 0.7 hours are due to absence from work and 3.9 hours to reduced productivity while at work.

5. REFERENCES