Assessment of rational use of Non-steroidal anti-inflammatory medications among patients with degenerative arthritis at a tertiary care rheumatology out-patient service

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Introduction

A clinical audit on use of non-steroidal anti-inflammatory drugs (NSAIDs) among degenerative arthritis in out patient clinics at Rheumatology tertiary care hospital in Sri Lanka, in relation to the NHSGGC NSAIDs guidelines.

Objective

NSAIDs are effective treatments for the relief of pain, swelling and stiffness of arthritis. It is being used increasingly in patients with degenerative arthritis. There are several guidelines on NSAIDs. However, only a few audits have been carried out to check whether the NSAIDs are used according to the guidelines. Here we aimed to assess adherence to guidelines when prescribing NSAIDs in patients with degenerative arthritis.

Methods

A structured audit form was developed and distributed to consulting medical officers in rheumatology clinics and the form was interviewer-administered focusing on factors that should considered when prescribing NSAIDs according to NHS Greater Glasgow and Clyde (NHSGGC) Oral Non-Steroidal Antiinflammatory guidelines. Initial sixty outpatients who presented within two weeks were enrolled in the study. Data was analyzed using a paired t-test. Reauditing was arranged after the introduction of the same guidelines in 2 months for the same cohort and data was analyzed to complete the audit cycle.

Results

Before the introduction of guidelines, the observed percentages of checking the status of blood pressure, serum creatinine, full blood count, use of Proton pump inhibitors, consideration of comorbidities, consideration of other medications, duration of NSAIDs use (as required/ < 1 month) were 0%, 0%, 0%, 98.33%, 20%, 11.67% and 23.33% respectively. After the introduction of guidelines, the observed percentages were 93.33%, 58.33%, 53.33%, 98.33%, 96.67%, 96.67% and 78.33% respectively. Then all the factors were analyzed using a paired t-test and p-values were calculated. All p values were < 0.001, except the use of PPI (p=0.659).

Conclusions

There were deficiencies when prescribing NSAIDs in degenerative arthritis. After the introduction of NSAID guidelines, there was a statistically significant improvement in prescription. The limitation of the study includes small population size.