Clinical Audit of Care in Rheumatoid Arthritis (CARA)

Summary of Final Report

on behalf of the CARA study team

Grant-holders – Dr Duncan Porter, Dr Anne McEntegart

Contact Details:

Dr Duncan Porter
Gartnavel General Hospital
1053 Great Western Rd
Glasgow
G12 0YN
Tel: 0141 211 3262
Fax: 0141 211 3466
E-mail: duncan.porter@ggc.scot.nhs.uk

Dr Anne McEntegart
Stobhill Hospital
132 Balornock Rd,
Glasgow
G21 3UW
Tel: 0141 201 3307
Fax: 0141 201 3888
E-mail: anne.mcentegart@ggc.scot.nhs.uk

Date of submission: December 2008

This project was funded by NHS Quality Improvement Scotland (Project reference P02/01)
Introduction

Rheumatoid arthritis (RA) is the most common inflammatory polyarthropathy in the United Kingdom, with an annual incidence of approximately 54/100,000/year for women, and 25/100,000/year for men; the prevalence of established disease is approximately 500-600/100,000. Treatment of RA is delivered by a multi-disciplinary team (MDT), and is directed towards the maintenance of patient independence and minimisation of disability, morbidity and excess mortality. An earlier audit of single handed rheumatologists in Scotland identified important recommendations regarding the management of patients with early RA, and SIGN guidelines on the diagnosis and management of early RA were published in 2000. Rheumatologists from 8 centres (Stobhill Hospital, Gartnavel General Hospital, Glasgow Royal Infirmary, Falkirk Royal Infirmary, Wishaw General Hospital, Fife Community Rheumatology Unit, Raigmore Hospital and Aberdeen Royal Infirmary) participated in the audit.

The main aim of the project was to conduct a prospective clinical audit of the implementation of the SIGN guideline 48 recommendations to identify if there are significant variations in the provision of care between individual clinical teams, hospitals or NHS boards. The audit included an examination of important short/medium term outcome measures to identify if there were significant variations in outcome, and to identify if these could in part be explained by any variations in the quality of clinical care that were found. It is hoped the results of the audit will facilitate the development of appropriate clinical standards of care.

Methods

The recommendations in SIGN guideline 48 were used to generate audit questions surrounding the care of patients with newly diagnosed RA, including: referral delays; patient education; use of non-steroidal anti-inflammatory drugs (NSAIDs); use of disease modifying anti-rheumatic drugs (DMARDs); disease activity; use of corticosteroids; involvement of the MDT; and patient satisfaction.

Sequential patients with a new clinical diagnosis of RA at each of the participating hospitals were invited to take part in the audit, and those agreeing to take part gave written, informed consent. Data were collected at baseline, 6 and 12 months using patient history and examination, patient-completed questionnaires and patient-held diaries of care. The audit was performed in two phases, each lasting 18 months with a 6 month recruitment period before a 12 month follow-up period. In total, 465 patients were recruited and 392 (84%) and 339 (73%) completed their 6 and 12 month assessments respectively.

Statistical analysis was performed by the Robertson Institute of Biostatistics, University of Glasgow, comprising descriptive statistics and multivariate analysis of factors predicting outcome at 12 months including unit, age,
gender, phase, disease activity, rheumatoid factor, presence of erosions, physical function, and health-related quality of life at baseline.

**Key Results**

1. *Referral patterns* – there was considerable delay before patients were seen in the rheumatology outpatient departments. A median of 35-44 weeks elapsed between the onset of symptoms and the first rheumatology outpatient assessment, with most of the delay occurring before referral from the GP. A median of 10 weeks elapsed between GP referral and the first rheumatology appointment, with no improvement between Phase 1 and Phase 2.

2. *NSAIDs* – NSAID use in patients with early RA is widespread, and a significant proportion of patients have additional risk factors for developing NSAID-induced peptic ulcer disease. A majority of these patients were prescribed GI protection, but 42 patients at high risk of GI toxicity continued on NSAID therapy without GI protection.

3. *DMARDs* – early use of DMARD therapy has become the norm. The present study shows a continuing preference for mono-therapy but with a gradual switch from sulphasalazine (SSZ) to methotrexate (MTX) to mirror world-wide trends. Clinicians choose alternatives, such as HCQ or combination therapy for those perceived as having less or more severe disease. SSZ and MTX are both reasonable options for patients’ initial DMARD therapy, but it is also reasonable to offer patients initial combination therapy if poor prognostic indicators are present.

4. *Disease activity & physical function* - at baseline, the patients recruited had evidence of active RA with significant disability and impaired health-related quality of life. There were improvements in DAS28, HAQ score and SF36 over 12 months. Overall, 44% of patients made a ‘good response’ to treatment, and 26% were in remission after 12 months of treatment.

5. *Allied health professionals* – there were significant variations in the availability of AHP services in different rheumatology units, particularly occupational therapy and physiotherapy, and there was very poor availability of podiatry services. Trusts and Health Boards should recognise the importance of the multi-disciplinary team in the delivery of high quality care, and should undertake to ensure that all RA patients should have rapid access to all members of the multi-disciplinary team.

**Key recommendations**

The audit has identified that there are important challenges to be faced in the delivery of high quality health care of patients with newly diagnosed RA surrounding delays in access to specialist medical and AHP care, drug therapy and patient-centred outcomes. Specific recommendations are made with respect to the need for further audit:
• audit of newly diagnosed RA should be an integral part of the Scottish Society for Rheumatology web-based audit programme. The data collected would be limited in the first phase but would be augmented in subsequent iterations of the audit programme.

• audit should continue to study outcome (e.g. remission rates), drug treatment, delays in referral, and access to AHP services.

References


