Clinical inertia in rheumatology practice

Arkiath Veettil Raveendran[1], Vinod Ravindran[2]

Abstract

Several professional medical learned societies and organisations have recommended guidelines for management of various chronic diseases geared to achieve optimal control over the diseases and improve the quality of care. However, the data from around the world suggest that a majority of patients are not achieving those treatment targets. This has been well documented in diseases such as diabetes, hypertension, dyslipidaemia and rheumatoid arthritis, and clinical inertia is thought to be a major factor responsible. In this article, we have discussed clinical inertia in rheumatology practice, which has relevance to several other chronic non-communicable diseases as well.

Correspondence to:
AV Raveendran
Badr Al Samaa
Barka
Sultanate of Oman

Email:
raveendranav@yahoo.co.in

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Introduction

Rheumatic diseases include several autoimmune inflammatory diseases such as rheumatoid arthritis (RA), psoriatic arthritis, spondyloarthropathies (SpA), Lupus, scleroderma and myositis, in addition to diseases such as osteoporosis, fibromyalgia, gout and osteoarthritis. These diseases are common in our society, but there are lingering concerns about whether they are being treated appropriately and in time. Available evidence suggests that there is a delay in diagnosing and treating various rheumatic diseases.[1,2] In this perspective, we discuss clinical inertia in the management of autoimmune rheumatic diseases as one of the major factors responsible for this delay and propose ways to overcome this. Though we have used several specific examples of RA, the principles are also applicable to other autoimmune rheumatic diseases.

Clinical inertia is defined as 'failure of healthcare providers to initiate or intensify therapy when indicated'.[3] Recognising clinical inertia is easy in the case of a disease where there is a well-defined treatment target value. For this reason, clinical inertia resulting in an inability to attain treatment targets has been well described in chronic diseases such as diabetes mellitus (DM), hypertension and dyslipidaemia.[4,5,6,7] In contrast, in multiple sclerosis, a disease with flare and remission, clinical inertia is defined as 'lack of treatment initiation or escalation when there is evidence of disease activity'.[8] Several rheumatic diseases also follow a course of relapses and remissions.

Some researchers divide clinical inertia into two broad categories – diagnostic inertia and therapeutic inertia – to account for both aspects. Based on previous discussion, we can define clinical inertia in rheumatic diseases as inability or undue delay to diagnose rheumatic diseases, initiate or intensify (escalate) therapy when the disease is active or de-escalate therapy when the disease is under remission. To understand clinical inertia in the context of rheumatic diseases, there should be clearly defined criteria and measurable parameters for disease activity to make early diagnosis and initiate and optimise treatment. Understanding the various factors contributing to clinical inertia is helpful in ensuring appropriate planning to tackle the issue (Table 1).

Inertia in diagnosis

Early diagnosis of rheumatic diseases is hugely important for starting proper therapy and achieving a favourable prognosis.[9] For example, in patients with RA, treatment must be initiated within 12 weeks from the onset of symptoms, which is described as the 'therapeutic window of opportunity'.[10] Early diagnosis and prompt treatment are important predictive factors for achieving remission in RA.[11] Diagnostic delays in other rheumatic diseases such as spondyloarthropathies and Lupus vary from months to years; more than 10 years in the former and as long as 30 months in the latter.[12,13]

Some of the factors that contribute to a delay in diagnosis are delayed presentation, varying clinical picture, lack of time in busy outpatient departments for proper evaluation, lack

[1]Specialist in Internal Medicine, Badr Al Samaa, Barka, Sultanate of Oman; [2]Consultant Rheumatologist, Centre for Rheumatology, Calicut, Kerala, India

of relevant expertise of healthcare providers, low awareness among patients leading to ignoring early symptoms, delay in referral from the primary care facility, symptomatic improvement with analgesics, and lack of laboratory facilities to test inflammatory and autoimmune markers. Atypical presentations and a negative laboratory report for immunological markers contribute to delay in diagnosis even in secondary and tertiary care levels. Diagnostic delay among seronegative RA patients compared with those with seropositive RA is a classic example of this.[14]

Inertia in initiating DMARDs

Early and aggressive therapy improves the outcome and helps in achieving remission in many autoimmune rheumatic diseases such as RA. Even though early initiation of conventional synthetic disease-modifying antirheumatic drugs (csDMARDs) is included in all treatment guidelines, there is often a significant delay.[15,16] Non-steroidal anti-inflammatory drugs (NSAIDs) and glucocorticoids act fast and reduce joint pain and stiffness. This symptomatic relief contributes to the delay in initiating treatment with DMARDs. Initiation and up-titration of DMARDs depend on various factors such as disease activity and severity, associated comorbidities and patient preference. Drug-specific factors such as cost, route of administration, adverse effects and frequency of monitoring can also contribute to clinical inertia in some healthcare settings.

It has also been reported that women of childbearing age with rheumatic diseases commonly receive suboptimal management and inappropriately discontinue treatment.[17] Lack of data means that the safety and potential risk of teratogenicity of available therapies are the main concerns during pregnancy and lactation, though there has been a rapid increase in our knowledge in recent years.[18]

Inertia in initiating biological DMARDs

In addition to cost, several other factors may contribute to clinical inertia in using various biological DMARDs in patients with rheumatic diseases, including the inconvenience of having injections, infusions requiring hospital visits, fear of infections and reactivation of latent tuberculosis. Failure to initiate these agents when there is severe disease or when conventional DMARDs have not been able to control disease activity often leads to poorer outcomes and reduces the chance of remission.

Inertia in modifying treatment

After starting DMARDs in patients with rheumatic diseases, further management depends upon the response and adverse effects, requiring either escalation (intensification) of therapy or de-escalation of therapy.

Escalation

In patients on DMARDs with persistent active disease, escalation of therapy is ideally indicated at the earliest opportunity to prevent organ damage and to achieve disease remission. However, in the real world there is considerable delay in this.

De-escalation

Similarly, de-escalation must be considered in patients who have achieved sustained disease remission, but this is also often delayed. Another reason to consider de-escalation is to minimise drug toxicities by reducing exposure.

Inertia in monitoring

Patients with rheumatic diseases require frequent clinical and laboratory monitoring to assess disease activity and drug-related adverse effects at specified intervals. This crucial aspect is often delayed due to many factors including financial constraints, which also contribute to clinical inertia (Table 1).

Inertia in addressing comorbidities

Associated comorbidities such as hypertension, diabetes and cardiovascular diseases also need to be addressed properly. Cardiovascular disease remains a major cause of mortality in patients with RA and Lupus.[19,20] In an international audit involving 19 countries of the management of dyslipidaemia and hypertension in patients with RA, it was noted that the lipid target attainment was only 45% and 18% in the high and very high risk groups respectively and 62% had hypertension, but only approximately half of these patients were attaining target blood pressure.[21] In another study, atherosclerotic cardiovascular disease (ASCVD) was present in 26.7% of patients with RA and DM, compared with 11.6% without DM, indicating the need for effective control of risk factors.[22] Inertia in controlling these risk factors and providing adequate screening for cardiovascular illness results in poorer outcomes.

How to tackle clinical inertia

Treat to target (T2T) in rheumatic diseases is used mainly to achieve disease remission. Any delay in diagnosis or in initiation and intensification of therapy can result in permanent organ damage and reduces the chance of remission. Clinical inertia due to various causes contributes to failure in achieving T2T goals. Addressing clinical inertia helps to overcome this.

Addressing factors contributing to clinical inertia, whether they are related to the patient, physician or system, may help in overcoming what is referred to as ‘treatment failure’. Factors that help overcome clinical inertia include educating the public and patients about rheumatic diseases, updating and training healthcare providers on various aspects of treatment, providing specialist support, adopting a multidisciplinary team approach, and improving healthcare facilities (Table 2).

Table 1 Factors contributing to clinical inertia in people with rheumatic diseases

Physician/provider-related factors
Concepts regarding care provided
Overestimation of current care
Complacency with current treatment response
'Wait until next visit' approach
Lack of time
Limited time to handle a number of competing demands
Lack of support
Lack of shared care organisation between the specialist and primary care
Lack of availability of multidisciplinary and/or team-based care
Delayed referral for specialist care
Lack of training
Lack of experience in evaluating and managing complicated rheumatologic issues
Lack of awareness of evidence-based goals of care
Lack of familiarity with guidelines – large number of guidelines, time required to keep updated
Failure to set and/or monitor progress towards treatment goals
Influence of medical specialty
Specialist versus general practitioner
Rheumatologist versus other specialists
Providers' ability to make appropriate decisions
Reluctance to change
Uncertainty regarding the assessment of available therapies
Organisational and structural factors
Stressful working conditions
(Dis)agreement with known guidelines
Ambiguity in the guidelines
Disagreement with the guidelines
Failure to reflect on the complexity of real-life situations
Uncertainty regarding the appropriateness of existing guidelines in special groups
Uncertainty regarding the safety of medications
Own clinical judgement and experience influencing application of specific guidelines
Individualisation of treatment goals – lack of clarity on how to personalise targets
Patient characteristics influencing providers
Old age, less active and less empowered
Women of childbearing age group, especially during pregnancy and lactation
Patient's medical factors and medical history
Comorbidities – more than one concomitant disease
Poly-pharmacy
Lack of alternative treatments
Concern about potential adverse effects and/or drug interactions
Socioeconomic and cultural disparity in terms of affordability or acceptability
Quality of the patient–provider relationship
Patient's disposition regarding adherence, health literacy, self-empowerment
Patient attitudes and preferences
Non-adherence
Providers' acknowledgment of patient preferences
Being put off by clinician's paternalistic approach in consultations
Prompt symptomatic relief with NSAIDS and glucocorticoids
Attitude towards injectable therapies and newer medications
Concern about adverse effects

Patient-related factors
Low health literacy
High cost of medication
Too many medications
Medication adverse effects
Non-adherence to prescribed drug
Socioeconomic factors
Poor communication between clinician and patient
Lack of trust in physician – negative media publicity, influence of alternative system of medicine and resultant misperception
Symptom relief even without DMARDs
Inability to follow complex treatment regimens
Lack of acknowledgment of disease severity

System-related factors
Time constraints
Inconsistencies between guidelines
Poor planning coordination and exchanges of data between members of the healthcare team
Poor communication between physician and other staff
Inadequate supportive technologies
Differing regional or county-specific standards affecting access to care
Lack of healthcare availability
Resource constraints that limit time and availability of staff
No active outreach to patients
No decision support
No team approach to care

Table 2 Steps to tackle clinical inertia

Physician/provider-related steps
Physician education and training
Improving awareness of clinical inertia and 'treat to target' concept
Communication and collaboration between specialists and primary-care physicians
Multidisciplinary approach
Adequate support from the specialist
Following the current practice guidelines
Coordination between primary and secondary care, and between medical and nursing personnel
Patient education to change their attitude towards treatment
Self-examination of performance by healthcare professionals
Computer-based decision support systems to offer clinical performance feedback
Telemonitoring and computed decision support based on clinical data and performance
Patient-related steps
Increased direct patient contact time
Increased opportunity to make early diagnosis
Increased opportunity to intensify care
Better monitoring of response to therapy
Reduced resistance to escalate intervention
Opportunity for regular educational inputs, in digestible packages
Development of a good rapport
Patient learns by experience that frequent review and adjustment of therapy is a part of good care rather than a sign of treatment failure
Open communication between physicians and patients
Role of patient education and shared medical decision
Improving self-management skills
Educating family members
System-related steps
Improvement in infrastructure and staffing
Consistent follow-up procedures
Reminding patients about their appointments (including proactive reminders)
Multidisciplinary/team approach
Improving communication between physician, paramedical staff and patients

Conclusion

Clinical inertia is common in all chronic non-communicable diseases and it is multi-factorial, with contributory elements from all stakeholders including healthcare set-ups and providers, patients and their caregivers. Before labelling management of rheumatic disease in an individual as a 'failure', careful consideration of relevant factors linked to clinical inertia may be helpful.

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