



REVISTA BRASILEIRA DE REUMATOLOGIA

www.reumatologia.com.br



Original article

Indirect and direct costs of treating patients with ankylosing spondylitis in the Brazilian public health system



Valderilio Feijó Azevedo^{a,*}, Chayanne N. Rossetto^a, Pedro G. Lorencetti^a,
Mariana Y. Tramontin^a, Bruna Fornazari^a, Denizar V. Araújo^b

^a Hospital de Clínicas, Universidade Federal do Paraná, Paraná, PR, Brazil

^b Universidade do Estado do Rio de Janeiro, Rio de Janeiro, RJ, Brazil

ARTICLE INFO

Article history:

Received 2 March 2015

Accepted 1 June 2015

Available online 9 September 2015

Keywords:

Ankylosing spondylitis

Indirect costs

Pharmacoeconomy

Quality of life

Direct costs

ABSTRACT

Introduction: Patients with ankylosing spondylitis require a team approach from multiple professionals, various treatment modalities for continuous periods of time, and can lead to the loss of labour capacity in a young population. So, it is necessary to measure its socio-economic impact.

Objectives: To describe the use of public resources to treat AS in a tertiary hospital after the use of biological medications was approved for treating spondyloarthritis in the Health Public System, establishing approximate values for the direct and indirect costs of treating this illness in Brazil.

Material and methods: 93 patients selected from the ambulatory spondyloarthritis clinic at the Hospital de Clínicas of the Federal University of Paraná between September 2011 and September 2012 had their direct costs indirect treatment costs estimation.

Results: 70 patients (75.28%) were male and 23 (24.72%) female. The mean age was 43.95 years. The disease duration was calculated based on the age of diagnosis and the mean was 8.92 years (standard deviation: 7.32); 63.44% were using anti-tumour necrotic factor drugs. Comparing male and female patients the mean Bath Ankylosing Spondylitis Disease Activity Index was 4.64 and 5.49 while the mean Bath Ankylosing Spondylitis Functional Index was 5.03 and 6.35 respectively.

Conclusions: The Brazilian public health system's spending related to ankylosing spondylitis has increased in recent years. An important part of these costs is due to the introduction of new, more expensive health technologies, as in the case of nuclear magnetic resonance and, mainly, the incorporation of anti-tumour necrotic factor therapy into the therapeutic arsenal. The mean annual direct and indirect cost to the Brazilian public health system to treat a patient with ankylosing spondylitis, according to our findings, is US\$ 23,183.56.

© 2015 Elsevier Editora Ltda. All rights reserved.

* Corresponding author.

E-mails: valderilio@hotmail.com, valderilio@edumed.med.br (V.F. Azevedo).

<http://dx.doi.org/10.1016/j.rbre.2015.08.009>

2255-5021/© 2015 Elsevier Editora Ltda. All rights reserved.

Custos diretos e indiretos do tratamento de pacientes com espondilite anquilosante pelo sistema público de saúde brasileiro

R E S U M O

Palavras-chave:

Espondilite anquilosante
Custos indiretos
Farmacoeconomia
Qualidade de vida
Custos diretos

Introdução: Os pacientes com espondilite anquilosante (EA) exigem uma abordagem de equipe com vários profissionais e várias modalidades de tratamento, continuamente; além disso, a doença pode levar à perda da capacidade de trabalho em uma população jovem, de modo que é necessário medir o seu impacto socioeconômico.

Objetivos: Descrever o uso de recursos públicos para o tratamento da EA em um hospital terciário após o uso dos fármacos biológicos ter sido aprovado para o tratamento das espondiloartrites pelo Sistema Público de Saúde e estabelecer valores aproximados para os custos diretos e indiretos do tratamento dessa doença no Brasil.

Material e métodos: Foram estimados os custos de tratamento diretos e indiretos de 93 pacientes com EA do ambulatório de espondiloartrite do Hospital de Clínicas da Universidade Federal do Paraná, entre setembro de 2011 e setembro 2012.

Resultados: Dos pacientes, 70 (75,28%) eram do sexo masculino e 23 (24,72%) do feminino. A idade média foi de 43,95 anos. A duração da doença foi calculada com base na idade do diagnóstico e a média foi de 8,92 anos (desvio padrão: 7,32); 63,44% dos indivíduos usavam fármacos anti-TNF. Na comparação dos pacientes dos sexos masculino e feminino, a média no Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) foi de 4,64 e 5,49, enquanto a média no Bath Ankylosing Spondylitis Functional Index (BASFI) foi de 5,03 e 6,35, respectivamente.

Conclusões: Os gastos do sistema público de saúde brasileiro relacionados com a espondilite anquilosante aumentaram nos últimos anos. Uma parte importante desses custos deve-se à introdução das novas tecnologias de saúde, mais dispendiosas, como no caso da ressonância nuclear magnética e, principalmente, da incorporação da terapia anti-TNF ao arsenal terapêutico. O custo médio anual direto e indireto do sistema público de saúde brasileiro para tratar de um paciente com espondilite anquilosante, de acordo com os resultados deste estudo, é de US\$ 23.183,56.

© 2015 Elsevier Editora Ltda. Todos os direitos reservados.

Introduction

Ankylosing Spondylitis (AS) is a chronic inflammatory disease, autoimmune in origin, which generally affects the spinal column and can evolve into stiffness and progressive functional limitation of the axial skeleton.^{1,2} It is more frequent in young adults aged between 20 and 40 years. There is a greater prevalence in males (3:1), Caucasians, and HLA-B27 positive individuals.^{2,3} The HLA-B27 antigen is strongly correlated with the appearance of the disease, and a positive test for this marker is found in 80–98% of cases.⁴ It is a progressive disease which, over time, causes the patient's quality of life to deteriorate. In advanced stages, it may lead to complete spinal ankyloses, known as "bamboo spine", and extreme reduction of mobility. Even in the initial stage of the disease, inflammatory lumbar pain may cause significant morbidity in the patient, complicating daily activities and even requiring temporary leave from work duties. Many patients suffer from the progressive loss of their capacity to work, which may result in early retirement, generating additional costs to the public welfare system.^{5,6}

The introduction of anti-TNF (anti-tumour necrotic factor) pharmaceuticals to treat AS in 2006 guaranteed patients better quality of life thanks to the efficacy of these medications

in lessening symptoms and the progression of the disease. Despite the efficacy and safety these medications provide, their high costs greatly impact health budgets in countries where these drugs were implemented. Various studies of cost effectiveness have been conducted in an attempt to assess differences between the anti-TNF therapies.⁷⁻⁹

Because this incapacitating disease requires a team approach from multiple professionals, various treatment modalities for continuous periods of time, and can lead to the loss of labour capacity in a young population, it is necessary to measure its socio-economic impact. International studies of the direct and indirect annual costs of AS have indicated a value of approximately 10 thousand euros per patient.^{10,11}

The last Brazilian study intended to demonstrate the direct and indirect costs in AS patients was published in 2010, and demonstrated significant differences between the domestic and international situations. The domestic cost was estimated at U\$4597 per patient/year. This value was low in comparison with the findings of international studies that had been published up to that point.¹² However, the Brazilian study was conducted before anti-TNF-alpha medications had been fully introduced into the Brazilian public health system (the Sistema Único de Saúde, or SUS). During the study period, anti-TNF medications were utilised by 13% of AS patients, representing 80% of medication costs.¹²

Download English Version:

<https://daneshyari.com/en/article/3385079>

Download Persian Version:

<https://daneshyari.com/article/3385079>

[Daneshyari.com](https://daneshyari.com)