Clinical Activity in Outpatient Rheumatology Clinics in Galicia, Spain

Manuel Rodríguez Gómez,[a] Juan Jesús Gómez-Reino,[b] Fausto Galdo Fernández,[c] Miguel Ángel González-Gay,[d] Íñigo Hernández Rodríguez,[e] Jesús Juan Ibáñez Ruán,[f] and the Galician Group for the Epidemiological Study of Rheumatic Disease*

[a]Section of Rheumatology, Ourense Hospital Complex, Ourense, Spain.
[b]Service of Rheumatology, Hospital Clínico Universitario, Santiago de Compostela, A Coruña, Spain.
[c]Service of Rheumatology, Hospital Juan Canalejo, A Coruña, Spain.
[d]Section of Rheumatology, Hospital Xeral, Lugo, Spain.
[e]Section of Rheumatology, Hospital Meixoeiro, Vigo, Pontevedra, Spain.
[f]Section of Rheumatology, Hospital POVISA, Vigo, Pontevedra, Spain.

Objectives: To analyze patients attending rheumatology units of the public health service in Galicia, Spain.
Patients and methods: We performed a multicenter study. Outpatients from all rheumatology clinics of the Galician health service were included over a 1-week period.
Results: A total of 1357 outpatients were studied (422 new patients and 935 follow-up patients). The mean ages were 55.1±15.6 and 56.9±16.7 years, respectively.
Among new patients, 22.5% had inflammatory disease, and 77.5% had noninflammatory disorders. The main source of patient referral was primary care. The overall kappa index in the analysis of agreement between the diagnosis of the referring physician and that of the rheumatologist was 0.8 (95% CI, 0.73-0.86). Agreement was appreciably lower in the group with inflammatory diseases.
Among follow-up patients, those with a diagnosis of inflammatory disorders represented 63.4% of the total. This group showed a higher score in the HAQ test and had a greater frequency of patients with permanent work disability.
Overall, patients with inflammatory disease required longer consultations than the remaining patients, and their discharge rate was considerably lower.
Conclusions: In rheumatology outpatient clinics, patients with inflammatory diseases are more numerous, spend longer in consultations, have greater disability, are more likely to show permanent work disability, and tend to accumulate with the passage of time. Agreement was high in the diagnosis of noninflammatory diseases, contrasting with the high referral rate.

Key words: Rheumatic diseases. Ambulatory care. Outpatient clinic.

Actividad asistencial en las consultas externas de las unidades de reumatología de Galicia

Objetivos: Análisis de los pacientes que son asistidos en las unidades de reumatología del servicio público de salud de Galicia.
Pacientes y métodos: Estudio multicéntrico. Se incluyeron pacientes durante el período de una semana de todas las consultas externas de reumatología dependientes del Servicio Gallego de Salud.
Resultados: Se estudiaron 1.357 pacientes, 422 nuevos y 935 revisiones. Las edades medias fueron 55,1 ± 15,6 y 56,9 ± 16,7 años, respectivamente.
Entre los pacientes nuevos, el 22,5% fue diagnosticado de enfermedades inflamatorias y el 77,5% de enfermedades no inflamatorias. La principal fuente de derivación de los pacientes fue medicina primaria. El índice kappa global para el análisis de concordancia entre los diagnósticos de los médicos remitentes y los establecidos por el reumatólogo fue de 0,8 (intervalo de confianza del 95%, 0,73-0,86). En enfermedades inflamatorias fue sensiblemente inferior.
Entre los pacientes revisados, los diagnosticados de enfermedades inflamatorias representaron el 63,4% del total. En este grupo de pacientes se observó mayor puntuación en el test HAQm y mayor frecuencia de casos con invalidez permanente.
Globalmente, los pacientes con enfermedad inflamatoria requirieron mayor tiempo de consulta que el resto de los pacientes, y en ellos la tasa de altas fue menor.

*The investigators that form this group are mentioned at the end of the manuscript.
This study has been funded by a research grant from the Sociedad Gallega de Reumatología.

Correspondence: Dr. M. Rodríguez Gómez.
Sección de Reumatología, Complejo Hospitalario de Ourense.
Ramón Puga, 52. 32005 Ourense. España.
E-mail: manrodri@telefonica.net

Manuscript received March 19, 2006; accepted for publication June 29, 2006.

Conclusiones: En las consultas externas de reumatología, los pacientes con enfermedades inflamatorias representan mayor número, consumen más tiempo de asistencia, muestran mayor grado de discapacidad y tienden a acumularse con el paso del tiempo. Hay un alto grado de concordancia diagnóstica con los médicos de atención primaria en enfermedades no inflamatorias que contrasta con una elevada tasa de derivación de éstas.

Palabras clave: Enfermedades reumáticas. Asistencia ambulatoria. Consulta externa.

Introduction

Rheumatic diseases have a high incidence in our setting. It is estimated that 13% of the population presents some kind of affection due to these illnesses. They constitute a frequent cause of demand of attention in primary care medicine, where they generate 12% of the visits.[1]

A great many rheumatic diseases have a chronic course and require, especially those illnesses of inflammatory nature, of rheumatology units for their study and periodic control. In our setting, the clinical activities of this specialty is done mainly in outpatient clinics or in outside-the-hospital units located in specialty centers or primary care facilities, by rheumatologists that depend on the hospital reference services. In spite of a clear and undeniable development of the specialty in the present moment, the availability of human resources is still insufficient in our sanitary system, and an adequate administration of these is needed. In consequence, analysis are necessary to delve into the recognition of the illnesses that are seen in everyday practice, the profile of the patients that are assisted in relation to their social and labor conditions and the limitations they present, as well as the time employed and the attitudes adopted by rheumatologists in their attention. This information will contribute to know interesting aspects of the current panorama of rheumatologic attention and extract useful conclusions to orient future plans of action.

The present study attempts to approach this problem. To that end we have established a simultaneous collaboration with all of the rheumatology assistance units in the Autonomous Community of Galicia, Spain. It is the first of this order to analyze the global situation in a sanitary region.

Patients and Methods

The study is of transversal and multicentric character relating to patients that seek attention in the outpatient clinics of rheumatology in the public assistance centers of the Autonomous Community of Galicia. It was done in the outpatient consult of all the rheumatology departments and hospital units and the specialty centers and primary care that have specialty consults that depend on the Galician Health System (SERGAS). These are: Hospital Juan Canalejo (A Coruña), Ambulatorio El Ventorrillo (A Coruña), Centro de Salud de Carballo, Hospital Clínico de Santiago, Hospital Comarcal de Barbanza (Ribeira), Hospital Arquitecto Marcide (Ferrol), Hospital Xeral de Lugo, Ambulatorio de Lugo, Centro de Salud de Sarria (Lugo), Centro de Salud de Villalva, Hospital de la Costa (Burela), Hospital Comarcal de Monforte, Hospital Montecelo (Pontevedra), Hospital Xeral-Cies (Vigo), Hospital Meixoeiro (Vigo), Hospital POVISA (Vigo), Centro de Especialidades Doblada (Vigo), Complejo Hospitalario de Ourense, and Hospital Fundación de Verín. The total population seen in these centers, according to the National Statistics Institute census of 2001, is of 2 731 669 inhabitants.

In each of the rheumatology outpatient consults of these centres data of the patients who sought during 1 week, attention was gathered in a simple manner. The participating departments chose the week to be studied in a period that went from November 1, 2003 to March 31, 2004. In every center all patients were included, with no type of selection.

It was estimated that the rate of patient loss, due to lack of compliance to the protocol or mistakes in the data collection, was less than 5% of the grand total. Every patient polled was invited to respond to a questionnaire concerning general information, distance from his or her home to the clinic and labor situation. The degree of impairment was measured through a modified HAQ questionnaire (HAQm). The consulting rheumatologist made a note on the data collection sheet of the patients origin, complementary tests that the patient brought, diagnostic suspicion with which the patient was sent, time since onset of disease and minutes employed in the consultation.

The diagnosis of the different illnesses was done according to standardized established criteria. For illnesses without established diagnostic criteria, the diagnoses were based on the clinical findings as described in current textbooks. The diagnoses were listed in 17 categories, which brought together the totality of rheumatic diseases classified in the ICD-9. Two generic groups were established: illnesses with an inflammatory origin and non inflammatory. In the first group illnesses in which inflammation is responsible for the pathologic process were included. In the group of non inflammatory illnesses the rest of the diseases were included. In the "other" genre we included non inflammatory diseases of scarce prevalence, non classifiable in the established categories. In the "diagnosis pending" genre,

cases that needed further complementary testing for their classification were collected. In the last group, "absence of rheumatic disease", we included cases without evidence of locomotor disease. These 3 last groups were grouped in the genre of disease with no inflammatory pathology. When the level of agreement was evaluated among the referring physicians and the rheumatologists, some diagnosis for which agreement was not possible were not analyzed: "indeterminate arthritis," "other," "diagnosis pending," and "absence of rheumatic disease." Diseases that had less than 12 cases were not analyzed either. Data was stored and processed with the SPSS version 8.0 software. The confidence interval (CI) was obtained to a level of 95%, using approximation to normal distribution. The statistical analysis of the association between nominal variables was done using the χ^2 test. For continuous variables Student *t* was employed. The degree of agreement among the reference diagnosis and the one done by the rheumatologist was evaluated using the kappa (κ) coefficient. A good correlation indicator was κ>0.75, satisfactory if κ=0.4-0.75, and poor if κ<0.4. Values of *P*<.05 were considered significant.

Results

One-thousand and fifty-seven patients were studied. Of these 422 were new and 935 were review. In the new patients, the mean age was 55.1±15.6 years, and the male-female ratio was 1/2.8. The reviewing patients had a mean age of 56.9±16.7 years, with the male-female (M/F) ratio of 1/2.3. The proportion of reviews/new patients was 2.22. In Figure 1 the population of new and reviewed cases, according to groups of age and gender are expressed.

New Patients

Table 1 shows the diagnostic groups of new patients. Inflammatory illness represented 22.5% of total, and the most common diagnoses within this group were rheumatoid arthritis (RA) (4%), collagen vascular disease and the vasculitis (4.5%) as well as crystal joint disease (4.3%). In the non-inflammatory disease group (77.5% of total), the most frequent diagnoses corresponded to osteoarthritis and mechanical peripheral joint disease (22.1%), mechanical or degenerative vertebral column disease (12.3%), fibromyalgia (9.7%), and soft tissue rheumatism (8.8%). In 37 patient´s diagnosis was not established at the moment of data collection. In 20 cases there was no evidence of rheumatic disease.

In Table 2 comparisons among groups of inflammatory illness and non-inflammatory illness, according to different variables are reviewed. The majority of patients were derived by primary care physicians (70.8%). 10% of cases originated from emergency departments of hospital centers. Trauma centers sent 8.5% of patients. Finally, in 10.7% of cases other services were there points of origin. Among the patients derived by primary care medicine and noninflammatory illness prevailed (*P*=.001), while in case is that proceeded from emergency departments and other services. There were more cases of inflammatory disease.

The mean time, since onset of the first symptoms caused by rheumatic disease to the day of consult was 24.1±31.2 months. In patients with inflammatory illness this period of time was less than in other patients (*P*=.0027). The waiting time since the consult was solicited to the actual consult was 3.8±3.9 months. The mean distance from the patient´s home to the hospital center was 17.1±20.2 km. It was larger in the group of patients with inflammatory process (*P*=.042).

The patient´s limitation, measured by the modified and reduced HAQ test showed a mean index of 0.58±0.5. There were no differences between the groups of inflammatory illness and noninflammatory illness. In total 35 patients (8.9%) were in a situation of temporal limitation due to the rheumatic process, and 22 (5.3%) had permanent limitations. We did not observe differences in the work situation among the 2 groups of illnesses.

By middle term, patients were dedicated 19.4±7.9 min of consult, significantly superior in the group of inflammatory illnesses (*P*<.0001).

The number of discharges after the first visit was 156, which represents 37.2% of total. It was significantly superior in noninflammatory illnesses (*P*<.0001). The 8 discharge patients with inflammatory illness correspondent to crystal joint disease. There was a significantly superior number of discharges in patients who came to their visit with an x-ray from their referring physician (*P*=.021). In 243 cases, the referral note had a presumptive diagnosis. The degree of agreement between the diagnoses made by the referring physician and the rheumatologist as reflected by the κ index was 0.8 (Table 3). Agreement levels are work better in crystal arthropathy, mechanical illness, and osteoarthritis of the back and fibromyalgia.

Rheumatoid arthritis, spondyloarthropathies, and metabolic bone disease reflected the lowest agreement index.

Reviews

Inflammatory illnesses predominated in reviews (63.4%). Among them, rheumatoid arthritis was the most frequent diagnosis (26.4%), followed by collagen tissue disease and vasculitis (14.7%), and spondyloarthropathies

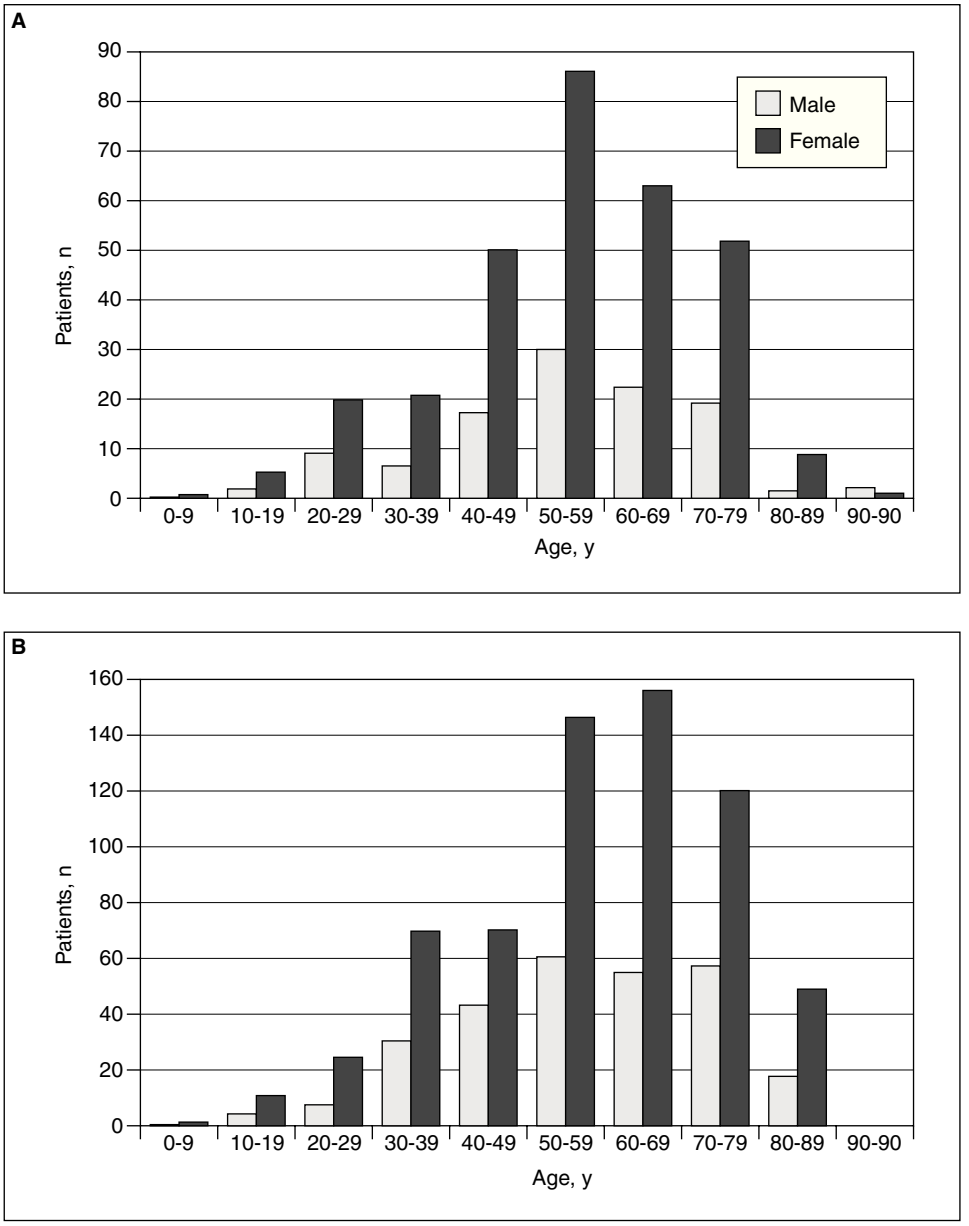

Figure 1. *Age and assisted population groups. A) new patients. B) reviews.*

(11.8%). Contrary to new patients, not inflammatory diseases were much less frequent in reviews, representing 36.6% of total. Metabolic bone disease (9.8%), osteoarthritis, and mechanical peripheral joint disease were the most prevalent illnesses in this group (Table 4).

The kind that these patients have been treated at the service, counting from the first year was 5.4±5 years. The time since the last visit to the present one was 5.3±5.4 months, less in patients with inflammatory illness (*P*=.03). This results translate as a global visit of 2.26 visits/year per patient.

The mean global distance from the patient´s home to the center was 22.6±24.1 km. The HAQm test reflected a mean global index of 0.6±0.6; in rheumatoid arthritis, it was 0.9. With respect to the work situation, 41 patients (4.4%) were temporarily out of a job due to the rheumatic disease, and 97 (10.48%) were permanently without a job. The mean time of consult was 15.8±6.9 min. In total, 176 of the patients (19%) were discharged.

Significant differences were observed between the groups of inflammatory and noninflammatory illness (Table 5). Patients in the first group had a longer time in rheumatology units (*P*<.0001), the period since the last visit was less (*P*=.03), the distance from their home was superior (*P*<.0001), they obtained a larger punctuation on the HAQm test (*P*<.0001), and in this group there

TABLE 1. Classification of the New Patients by Diagnosis

	Number of Patient %
Rheumatoid arthritis	17 (4)
Collagen tissue disease/vasculitis	19 (4.5)
Polymyalgia rheumatica	4 (0.9)
Spondyloarthropathies	21 (5)
Crystal arthropathy	18 (4.3)
Undifferentiated arthritis	14 (3.3)
Infectious arthritis/osteitis	2 (0.5)
Total inflammatory disease	**95 (22.5)**
Osteoarthritis and mechanical peripheral joint disease	93 (22.1)
Vertebral spine mechanical disease or osteoarthritis	52 (12.3)
Soft tissue rheumatism	37 (8.8)
Metabolic bone disease	27 (6.4)
Fibromyalgia	41 (9.7)
Radiculopathies	5 (1.2)
Entrapment neuropathies	11 (2.6)
Other	4 (0.9)
Diagnosis pending	37 (8.8)
Absence of rheumatic disease	20 (4.7)
Total non-inflammatory disease	**327 (77.5)**

TABLE 2. General Characteristics of New Patients*

	Inflammatory Disease (n=95)	Non-Inflammatory Disease (n=327)	*P*
Site of reference			
Primary care, %	53 (55.8)	246 (75.2)	.001
Emergency room, %	19 (20)	23 (7)	.001
Trauma, %	6 (6.3)	30 (9.2)	NS
Other, %	17 (17.9)	28 (8.6)	.017
Time since onset, m	17.6±32.7	26.2±30.9	.027
Distance to center, km	21.4±25.1	15.7±18.2	.042
HAQm punctuation	0.65±0.58	0.56±0.54	NS
Temporal limitation, %	8 (8.4)	27 (9.3)	NS
Permanent limitation, %	6 (6.7)	16 (5.1)	NS
Time of consult, min	23.2±8.1)	18.2±7.4	<.0001
Discharge, %	8 (10.3)	146 (46.1)	<.0001

*Data is expressed as median±DE or as %.

TABLE 3. Agreement Between the Diagnosis Made Previously and the One Done by the Rheumatologist*

	κ Index (95% CI)
Rheumatoid arthritis	0.45 (0.20-0.70)
Collagen tissue disease/vasculitis	0.77 (0.58-0.97)
Spondyloarthropathies	0.59 (0.34-0.83)
Crystal arthropathy	0.84 (0.74-0.90)
Osteoarthritis and mechanical peripheral joint disease	0.70 (0.59-0.81)
Vertebral spine mechanical disease or osteoarthritis	0.83 (0.71-0.95)
Soft tissue rheumatism	0.73 (0.58-0.88)
Metabolic bone disease	0.51 (0.43-0.62)
Fibromyalgia	0.83 (0.71-0.97)
Total	0.80 (0.73-0.86)

*CI indicates confidence interval.

were more cases of permanent limitation (*P*=.002). Nevertheless, there were no differences between the 2 groups in case percentages of temporal limitation. Duration of the consult was similar in both groups. The proportion of discharge was significantly higher in the group with noninflammatory disease (*P*<.0001).

Discussion

This study groups a sample of assistant activities in outpatient consults, with patients studied during the same period of time in the participating rheumatology units. The flow of patients was as usual, and no patient selection was done. In this study, we have not pretended to do a detailed analysis of the mechanisms of the different services, rather to obtain a global idea of the activity and the characteristics of all assisted patients. The reasons for which the patients were referred from other hospital services or primary care physicians is unknown. Frequently, the patients are referred because they present illnesses that are more severe or that require a more difficult treatment, or because patients ask for their referral, or due to other causes. In consequence, our results make reference only to the patients that are derived to rheumatology consults, and cannot be extended to all patients with rheumatic disease in the community. He referred patients accordingly. There was a predominance of the female gender and a mean age in the sixth decade of life. Only 22.5% of the total present that rheumatic inflammatory disease. The most frequently diagnosed illnesses were osteoarthritis, mechanical peripheral joint disease, and mechanical

TABLE 4. Reviewed Patients: Distribution According to Diagnosis Group

	Number of Patients, %
Rheumatoid arthritis	247 (26.4)
Collagen tissue disease/vasculitis	137 (14.7)
Polymyalgia rheumatica	22 (2.4)
Spondyloarthropathies	110 (11.8)
Crystal arthropathy	46 (4.9)
Undifferentiated arthritis	23 (2.5)
Infectious arthritis/osteitis	7 (0.7)
Total inflammatory disease	**592 (69.4)**
Osteoarthritis and mechanical peripheral joint disease	82 (8.8)
Vertebral spine mechanical disease or osteoarthritis	42 (4.5)
Soft tissue rheumatism	34 (3.6)
Metabolic bone disease	92 (9.8)
Fibromyalgia	26 (2.8)
Radiculopathies	12 (1.3)
Entrapment neuropathies	6 (0.6)
Other	29 (3.1)
Diagnosis pending	9 (0.9)
Absence of rheumatic disease	11 (1.2)
Total non-inflammatory disease	**343 (36.6)**

TABLE 5. Characteristic of the Reviewed Patients*

	Inflammatory Disease (n=586)	Non-Inflammatory Disease (n=349)	*P*
Years of treatment	6.4±5.4	5.7±5.7	<.0001
Time since onset, m	5±4.5	5.8±6.5	.03
Distance to center, km	24.4±26.1	17.8±22.4	<.0001
HAQm punctuation	0.67±0.67	0.55±0.51	<.0001
Temporal limitation, %	23 (3.9)	18 (5.3)	NS
Permanent limitation, %	76 (12)	21 (6.2)	.002
Time of consult, min	14.6±5.4	13.7±7	NS
Discharge, %	22 (3.8)	154 (45.4)	<.001

*Data is expressed as median±DE or as %.

and degenerative vertebral column disease. These results are similar to previous ones in our country,[2] but differs substantially from other studies done in other centers were eating etiology of rheumatic disease or sanitary planification is different from ours.[3,4] Even though the majority of patients (70.8%) were derived by primary care physicians, and other series, this proportion was >90%.[5-7] Another difference from these studies was that we observed an appreciable proportion of patients derived from other departments, mainly emergency rooms and trauma. It was noticeable that among patients derived from their primary care physicians there was a lesser proportion of inflammatory illness. Attention must be called to the fact that among the patients derived by their primary care physicians there was a lesser proportion of inflammatory illness. The mean delay time for a patient to be seen by rheumatologists was 3.8±3.9 months. This period of time is similar to the one referred to in other series done in countries in our own continent.[8-10] Another fact that must be taken into account is the considerable time period that passed from the onset of rheumatic symptoms to their first visit with the specialist. Special importance must be focused on inflammatory illness, which is the most specifically benefited by treatment by the rheumatologist. In these it was of 17.6±32.7 months since the onset of symptoms of the patients. This lapse must be considered excessive, because an early intervention in these illnesses can be crucial to obtain an adequate control and improve their prognosis. In this aspect programs should act on educating general practitioners and the general population, as well as organizing the sanitary resources to prioritize the early attention of these illnesses. In the present analysis, the mean amount of time employed in the first visit was 19.4±7.9 min, and in inflammatory illnesses it was discreetly superior (23.2±8.1). Recently, the Spanish Society of Rheumatology did a study to develop standards of process times and assistance quality in rheumatology, in which it estimates that the time period that first consults should consume should be 30 minutes, going from 40 minutes in systemic illness and 20 minutes for osteoarthritis.[11] The time periods shown in this analysis are far from being considered ideal, and can reflect an adaptation exercise by the rheumatologist to consult an excessive number of patients.

Many patients were discharged on her first visit. The majority of these patients had mechanical disease, and 8 cases with inflammatory disease had crystal arthropathy. It is to be emphasized that, in part, the large amount of discharges in new patients correspond to the ones with mechanical disease that came to their visit with x-rays done by their primary care physician. Other studies reflect the importance of this proposal,[5] and it has been stated that 40% of first visits can be solved by a single visit.

In the agreement analysis between the previous diagnoses and the one admitted by the rheumatologist, a global κ index of 0.8 was achieved, which indicates a

good correlation. The difference with other studies, in which he obtained indexes were inferior,[12-15] can be partly due to the fact that frequently the patients referred without a precise diagnosis, indicating only the principal symptoms for which the patients should be investigated. In only 243 (57.6%) of the referral notes there was a suspicion diagnosis and, in consequence, our study was limited to those patients. Probably the vast majority of patients sent without a diagnosis correspondent to cases in which the referring physicians had larger doubts about their classification. In consequence, the obtained indexes can overestimate their diagnostic capacity. The indexes were superior in mechanical illness, osteoarthritis, fibromyalgia, and crystal joint disease. Inversely, a lower agreement was observed in inflammatory diseases such as rheumatoid artritis, spondyloarthropathies, and metabolic bone disease.

Due to the elevated index of agreement with the rheumatologists in non-inflammatory illnesses, it is surprising to find elevated rates of referral for these illnesses by the primary care physicians. This fact cannot be attributed to diagnostic problems by the referring physicians, but rather to a poor capacity in the satisfactory treatment of these diseases. Assistential pressure and the demand of specialized attention can also influence this. In consequence, collaboration programs between the primary care physicians and the rheumatology units are needed. Different strategies have obtained positive results with the modification of primary care physicians conduct, with the following significant reduction in the referral rates, mainly of diseases such as fibromyalgia, osteoarthritis, and soft tissue rheumatism.[16]

Contrary to the new patient group, in the review cases there was a clear dominance of inflammatory illness. Among these, the clear leaders were rheumatoid arthritis, taking up 26.4% of total reviews. This high prevalence of RA in the reviewed patients is similar to other studies,[2,3] and goes accordingly to the one reported by the American College of Rheumatology with the estimation that 80% of patients with RA must be followed by rheumatologists.[17]

The impact of rheumatic disease over limitations is reflected in different studies done in our country.[18,19] It has been observed that they occupied the third base as a cause of temporal limitation, constituting the first cause of permanent limitation, and representing 33.47% of the total cost of economic subsidies due to limitation. In our study, in reviewed patients, 12.9% of the ones with inflammatory disease were on a permanent limitation regiment. Also, in inflammatory illnesses, especially in the group of rheumatoid arthritis, a high punctuation was observed in the HAQm test. Nonetheless, in new patients the limitation measured by the HAQm test, and in the rates of temporal limitation and permanent limitation, similar findings were reported between inflammatory and on inflammatory disease. Today, the excessive number of rheumatic patients coming to rheumatology consults has forced the creation of selection models that permit access to these, garanting less time to the patients with mechanical illness and soft tissue rheumatism.[20,21] Data sheer presented indicate that part of noninflammatory bone and muscle disease, in many cases considered "mild," cause at least initially the same degree of limitation, and transitory work problems as inflammatory illness, which leads to reflect on the need to give adequate assistance coverage to these patients, as demanded by society. Given that the majority of these patients are at a productive working age, their attention should be considered a priority because it has been proven that adequate attention can positively influence the recovery of these patients, with the subsequence economical savings. In an interesting study, Abásolo et al[22] demonstrated that a specialized attention regimen significantly reduces the time of limitation in patients with locomotor system disease, and the project is cost-effective, with significant savings in direct and indirect costs.

Globally, the percentage of discharge is inferior to the rest of the diseases. Apart from that, these patients are followed more frequently than patients with non-inflammatory disease, and the time they have spent being attended by a rheumatologist, calculated from their first visits to the time of consult, is superior in patients with inflammatory disease. All of this determines that there is a progressive accumulation in the time of the patients with inflammatory pathologies[5] and the professionals are every day more focused on their attention, the exacting first time patients with other limiting illness.

List of Members of the Galician Group for the Epidemiologic Study of Rheumatic Disease

F. Galdo Fernández, A. Atanes Sandoval, J. Graña Gil, J.L. Fernández Sueiro, F. Blanco García, M. Freire González, F.J. de Toro Santos, J.A. Pinto Tasende (Hospital Juan Canalejo, A Coruña); J.J. Gómez-Reino Carnota, M. Caamaño Freire, A. Mera Varela, J.S. Blanco Rodríguez, S.A. Insua Vilariño, E.M. Pérez Pampin, J.J. Amarelo Ramos (Hospital Clínico Universitario, Santiago de Compostela); J.L. Guerra Vázquez, M. Rodríguez López (Hospital Arquitecto Marcide, Ferrol); J.C. Cea Pereiro (Hospital Comarcal de Barbanza, Ribeira); M.A. González-Gay Mantecón, C. García Porrúa, A. Sánchez-Andrade Fernández (Hospital Xeral, Lugo); M.J. Madrigal Domínguez (Hospital de la Costa, Burela); V.E. Quevedo Vila (Hospital Comarcal, Monforte); M.E. Amigo Díaz (Ambulatorio de Lugo, Centro de Salud de Sarria y Centro de Salud

de Villalva, Lugo); J. Cruz Martínez, J.A. Mosquera Martínez, S. Romero Yuste (Hospital Montecelo, Pontevedra); C. Barbazan Álvarez, B. Aspe de la Iglesia (Hospital Xeral-Cies, Vigo); I. Hernández Rodríguez, J.M. Pego Reigosa (Hospital Meixoeiro, Vigo); J.J. Ibáñez Ruán, M. González Pérez (Hospital POVISA, Vigo); J.L. Ferreiro Seoane (Centro de Especialidades Doblada, Vigo); M. Rodríguez Gómez, A. Willisch Domínguez, L. Fernández Domínguez (Complejo Hospitalario de Ourense, Ourense); B.C. González Álvarez (Hospital Fundación Verín, Verín).

References

1. Sociedad Española de Reumatología, Liga Reumatológica Española. Gabinete Pfizer de recursos humanos. Reumatos´90. Estudio sociosanitario sobre las enfermedades reumáticas en España. Madrid: Servicio Pfizer de publicaciones; 1992.
2. Morales Romero J, Cázares Méndez JM, Gámez Nava JI, Triano Páez M, Villa Manzano AI, López Olivo MA, et al. La atención médica en reumatología en un hospital de segundo nivel de atención. Reumatol Clin. 2005;1:87-94.
3. Wolfe F, Flowers N, Anderson J. The national rheumatic disease data bank: case mix and severity characteristics of patients in rheumatological practice. Arthritis Rheum. 1998;41 Suppl 1:132.
4. Strusberg I, Drenkard C, Roqué MH, Gamron S, Barberis G, Onetti CM. Análisis de pacientes ambulatorios que concurren por primera vez al servicio de reumatología de un hospital universitario. Rev Esp Reumatol. 2000;27:382-7.
5. Collado P, Bañares A, Hernández C, Fernández B, Ramos P, Morado I, et al. Asistencia reumatológica en una consulta externa de un hospital terciario: experiencia de tres años. Rev Esp Reumatol. 2006;23:9-16.
6. Rivera J, García-Monforte A. Consulta hospitalaria de reumatología. Hacia el tratamiento y control de la enfermedad inflamatoria. Rev Esp Reumatol. 1994;21:44-8.
7. Gómez Rodríguez N, Ibáñez Ruán J, Penelas-Cortés Bellas Y, García Ferreiro T. Análisis comparativo de las consultas externas de reumatología y cirugía ortopédica-traumatología en un área sanitaria gallega. Rev Esp Reumatol. 2001;28:52-6.
8. Shipton D, Badley EM, Bookman AA, Hawker GA. Barriers to providing adequate rheumatology care: implications from a survey of rheumatologists in Ontario, Canada. J Rheumatol. 2002;29:2420-5.
9. Turner G, Symmons D, Bamji A, Palferman T. Consultant rheumatology workforce in the UK: changing patterns of provision 1997-2001. Rheumatology. 2002;41:680-4.
10. Kirvan JR, Averns H, Creamer P, Davies M, Hickling P, Hutton C, et al. Changes in rheumatology out-patient workload over 12 years in the southwest of England. Rheumatology. 2003;42:175-9.
11. Desarrollo de estándares de tiempos de proceso y calidad asistencial en Reumatología. Informe final. Sociedad Española de Reumatología. June 2005.
12. Bolumar F, Ruiz MT, Hernández I, Pascual E. Reliability of the diagnosis of rheumatic conditions at the primary health care level. J Rheumatol. 1994;21:2344-8.
13. Gámez-Nava Jl, González-López L, Davis P, Suárez-Almazor ME. Referral and diagnosis of common rheumatic diseases by primary care physicians. Br J Rheumatol. 1998;37:1215-9.
14. Calabozo M, Aretxabala I, Pérez-Ruiz F, Alonso-Ruiz A, Fraiz E, Ruiz-Lucea E. Concordancia diagnóstica sindrómica entre reumatólogo y médico remitente. Rev Esp Reumatol. 1996;23:176.
15. Cruz L, Gutiérrez C, López L, Descarrega R, Juncosa S, Olivé A, et al. Análisis de la derivación de pacientes a un servicio hospitalario de reumatología. Rev Esp Reumatol. 1995;22:311-6.
16. Schulpen GJ, Vierhout WPM, van der Heijde DM, Landewe RB, Winkens RA, van der Linden S. Joint consultation of general practitioner and rheumatologist: does it matter? Ann Rheum Dis. 2003;62:159-61.
17. Marder WD, Meenan RF, Felson DT, Reichlin M, Birnbaum NS, Croft JD, et al. The present and future adequacy of rheumatology mampower. A study of health care needs and physician supply. Arthritis Rheum. 1991; 34:1209-17.
18. Tornero J, Piqueras JA, Carballo LF, Vidal J. Epidemiología de la discapacidad laboral debida a las enfermedades reumáticas. Rev Esp Reumatol. 2002;29:373-84.
19. Blanco M, Candelas G, Molina M, Bañares A, Jover JA. Características de la incapacidad temporal de origen musculosquelético en la Comunidad Autónoma de Madrid durante un año. Rev Esp Reumatol. 2000;27:48-53.
20. Tovar Beltrán JV, Navarro Blasco FJ. Consulta externa de reumatología: utilidad de las consultas de urgencias. Rev Esp Reumatol. 1999;26:375-7.
21. Rúa Figueroa I, Erausquin C, Naranjo A, Ojeda S, Francisco F, Rodríguez-Lozano C. Reumatología ambulatoria y hospitalaria unificadas: un año de experiencia en estratificación de consultas. Rev Esp Reumatol. 1999;26:297-303.
22. Abásolo L, Blanco M, Bachiller J, Candelas G, Collado P, Lajas C, et al. A health system program to redjuce work disability related to musculoskeletal disorders. Ann Intern Med. 2005;143:404-14.