PROPOSED DIAGNOSTIC CRITERIA FOR RHEUMATOID ARTHRITIS*†

REPORT OF A STUDY CONDUCTED BY A COMMITTEE OF THE AMERICAN RHEUMATISM ASSOCIATION:

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In a disease such as rheumatoid arthritis in which the aetiology is unknown and in which there is no available proof of the diagnosis, a broad description of the disease usually suffices for teaching and for diagnosis in individual cases. When such a method is used for classifying patients for study, however, there is little uniformity in the cases included in any series labelled rheumatoid arthritis (Cobb, Merchant, and Warren, 1955). It is often extremely difficult, therefore, to compare studies from one physician or clinic with those from another—whether the studies relate to prevalence, incidence, manifestations, course, treatment, or other features of the disease.

In order to obtain more uniformity in cases listed as rheumatoid arthritis, a committee of the American Rheumatism Association on diagnostic criteria was formed, with full realization that it would be very difficult to determine the limits of the diagnosis "rheumatoid arthritis". In view of this difficulty, it seemed wise to classify rheumatoid arthritis in three categories: definite, probable, and possible. In the definite group there should be almost no question that every patient has rheumatoid arthritis and in the probable group the likelihood should be great that every patient has rheumatoid arthritis. These two groups should be used for any study or report of the characteristics, course, and treatment of rheumatoid arthritis. The criteria for the third, the "possible" group, are much less rigid and, of necessity, some patients who do not have rheumatoid arthritis may be included in this category. Only by having liberal criteria in this group, however, will it be possible to pick up early and atypical cases which can be followed profitably to learn more of the course and nature of the disease. The inclusion of patients who do not have rheumatoid arthritis will not be serious. Errors in diagnosis will become apparent as the

patients in this category are followed, and at no time can this group be used for definite conclusions concerning the characteristics or treatment of rheumatoid arthritis. The criteria are not designed primarily to aid a physician in making a diagnosis in an individual case, but rather to establish the findings necessary to allow inclusion of a patient in one or another of the categories.

In selecting the individual criteria for use, it was at once apparent that many of the signs and symptoms of the disease are entirely non-specific and of no value in differential diagnosis, and therefore not useful in allocation of patients to the categories. The majority of these non-specific findings are indications of the systemic involvement in the disease—as, for instance, fatigue, anorexia, fever, lymphadenopathy, anaemia, leucocytosis, or leucopenia. Others, indicative of musculo-skeletal inflammation and its sequelae—tenosynovitis, muscle atrophy, skin atrophy—are also relatively non-specific and are not included.

The final selection of appropriate criteria was made in the following manner. On the basis of the clinical experience of the members of the committee, a list was formed of all of the manifestations of rheumatoid arthritis which might have sufficient diagnostic value to be worthy of consideration. Data from the Pittsburgh Arthritis Study (Cobb, Merchant, and Warren, 1955; Cobb, Thompson, Rosenbaum, Warren, and Merchant, 1956) were then examined to give indication of the diagnostic value of the various manifestations. Finally, data were collected from a number of physicians particularly interested in rheumatic diseases in various sections of the United States and Canada.* Each physician was asked to select from his clinic or practice the most recent five cases of definite rheumatoid arthritis, five cases of probable rheumatoid

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arthritis, and five cases with no evidence of rheumatoid arthritis. On each case a detailed form was filled out from the record. In all, 332 suitable case reports were received from nineteen different cities. These were analysed to give further information about the diagnostic value of the signs, symptoms, and laboratory tests, individually and in various combinations.

The analytical procedure was very simple. It consisted of studying, in a four-fold table, the relationship between the diagnosis of rheumatoid arthritis and the particular manifestation or group of manifestations under study. In order to simplify the reporting, the values of sensitivity and specificity as defined in Table I were computed. Examination of this Table reveals that the essence of sensitivity can be stated as the number of persons with the diagnosis of rheumatoid arthritis who meet the criterion under consideration divided by the number of persons with rheumatoid arthritis about whom there is information with respect to this criterion. The specificity of the given criterion or set of criteria is defined as the number of persons who do not have rheumatoid arthritis and do not meet the criterion divided by the total number of persons who do not have rheumatoid arthritis, but for whom there is information about the criterion under study. This method of analysis has usually been reserved for the study of chemical and serological tests, but, as has been shown by Kurlander, Hill, and Enterline (1955), it is equally applicable in the study of symptoms and signs.

TABLE I
SENSITIVITY AND SPECIFICITY DEFINED

Diagnosis		Not Rheumatoid Arthritis	Rheumatoid Arthritis
Criterion	Absent	<i>a</i>	<i>c</i>
	Present	<i>b</i>	<i>d</i>
		<i>a + b</i>	<i>c + d</i>

$$\text{Sensitivity} = \frac{d}{c + d}$$

$$\text{Specificity} = \frac{a}{a + b}$$

With this analytical method in mind, it was agreed that, since we were looking for criteria for definite, probable, and possible rheumatoid arthritis, the emphasis would be on high specificity for the definite group and high sensitivity for the possible group. The definite group should thus contain very few persons who do not truly have rheumatoid arthritis,

while the possible group should exclude relatively few persons who have rheumatoid arthritis, though it may include a considerable number who do not. The justification for the latter was thought to be that when the manifestations required for diagnosis of possible rheumatoid arthritis are met, the possibility of this diagnosis should always be entertained, even though it may be excluded or supplanted on further study.

It seems appropriate to report some of the results of the analyses, for they have served to clarify in our minds the relative diagnostic value of certain much-discussed manifestations. The first step was to eliminate those features that were shown to be of too little value. The following manifestations fit into this category: weight loss, vasomotor symptoms, paraesthesias, splenomegaly, pericarditis, myocarditis, pleurisy, reversal of the albumin/globulin ratio in the plasma or synovial fluid, and thickening of the palmar fascia. Analysis of the remaining criteria, on the basis of both the Pittsburgh Arthritis Study and the material reported by rheumatologists directly to the committee, gave the data on sensitivity and specificity presented in Table II.

TABLE II
ESTIMATES OF THE DIAGNOSTIC VALUE FOR PROBABLE AND DEFINITE RHEUMATOID ARTHRITIS OF CERTAIN MANIFESTATIONS OF THIS DISEASE FROM THE PITTSBURGH ARTHRITIS STUDY AND THE ARA PHYSICIANS' STUDY

Manifestations of Disease	Pittsburgh Arthritis Study		A.R.A. Physicians' Study	
	Sensitivity	Specificity	Sensitivity	Specificity
Morning Stiffness	0.99	0.79	0.99	0.38
Pain on Motion or Tenderness	0.58	0.84	0.98	0.14
Joint Swelling	0.91	0.85	0.94	0.41
Symmetrical Joint Swelling	0.13	0.99	0.71	0.61
Nodules	0.17	0.99	0.18	0.95
X-Ray Changes typical of Rheumatoid Arthritis*	0.31	0.93	0.55	0.72
Sheep Cell Agglutination	—	—	0.60	0.91
Poor Mucin Precipitate from Synovial Fluid†	—	—	0.85	0.29
Histological Evidence of Rheumatoid Arthritis†	—	—	0.38	1.00

* There was some confusion about the interpretation of this item in the ARA Physicians' Study resulting in an estimate of specificity which may be lower than it should be.

† The numbers are small so the estimates of sensitivity and specificity are not very stable.

Here one sees immediately that the estimates of specificity run higher for the material of the Pittsburgh Arthritis Study than for the data from the American Rheumatism Association physicians. This is to be expected because of the different sampling bases of the two studies. In a population sample where there are many people entirely free from joint complaints, the specificities should be higher than in the office or clinic practice where everyone coming under observation thinks he has some joint complaint. There is no saying which of these is correct. It can merely be pointed out that one set of figures estimates the population situation, while the other estimates the situation in clinical practice.

Table III shows the relationship between the number of major criteria and the diagnoses reported by the American Rheumatism Association physicians. It is clear that our objective of high specificity for the definite classification has been closely approached. Again recognizing the nature of the sample, we realize that a population study would give higher specificity for these same criteria. The sensitivity is good, considering that, for simplicity of handling the data in this Table, the items on which no information is available have been handled as if the criterion in question were absent. When the probable and definite rheumatoid groups are com-

bined, the sensitivity is higher and the specificity lower. We have no data from the American Rheumatism Association physicians on the possible diagnosis so the Pittsburgh Arthritis Study material was examined in this regard. It was found that the sensitivity rose to 0.98, and that the specificity is also high, 0.91, because this is a population group rather than a clinic group. Again the stated objective for this group, high sensitivity, has been achieved.

On the basis of the results of these analyses eleven criteria were selected, and it was concluded that five of these eleven criteria should be required for allocation of a patient to the category of "definite rheumatoid arthritis" and three for allocation to the category "probable rheumatoid arthritis".

An attempt was made, as discussed above, to make the criteria for definite and probable rheumatoid arthritis rigid enough to be as sure as possible that all cases included have rheumatoid arthritis. This was essential, since patients in these categories will be used for study of the disease and often serve as a basis for statistical conclusions as to prevalence, incidence, characteristics, course, and treatment. It is important, however, that the criteria be not so strict that only cases of great severity or long duration can be included. Therefore, the duration required for allocation to these categories was made as short as possible (6 weeks and 4 weeks), but long enough to tend to exclude infectious and traumatic arthritis and, in general, rheumatic fever. Also, as small a number of joints was required as possible—only one, if other adequate clinical or laboratory evidence, such as characteristic histological changes in synovial tissues or nodules, was present.

The criteria as listed below need not be discussed individually. Morning stiffness may be either subjective or objective and may vary from a feeling of stiffness to actual limitation of motion. By definition it disappears or decreases during the day. It may persist for only a few minutes or may last for many hours. The evidence of joint involvement must be objective and must be observed by a physician—though all observations need not necessarily be made by the same physician. Emphasis should be laid on the fact that the swelling cannot be bony enlargement alone but must entail soft tissue thickening or actual effusion. When two joints are not involved simultaneously, they may satisfy the criterion of involvement of more than one joint if there is no interval of freedom from joint symptoms of more than 3 months. If the interval were longer the possibility of two separate types of joint disease being present would be greater. Symmetry of joint involvement is acceptable as a criterion in any joints except the terminal phalangeal joints. The latter are

TABLE III

THE RELATIONSHIP BETWEEN THE MAJOR CRITERIA AND THE DIAGNOSES IN THE A.R.A. PHYSICIANS' STUDY

Criteria	Rheumatoid Arthritis Diagnosis			Total
	None	Probable	Definite	
Excluded, or Less than Three Major Criteria	78	21	7	106
Three or four Major Criteria	23	70	30	123
Five or More Major Criteria	0	18	85	103
Total	101	109	122	332

$$\text{Sensitivity of five or more criteria for Definite Rheumatoid Arthritis} = \frac{85}{122} = 0.70$$

$$\text{Specificity of five or more criteria for Definite Rheumatoid Arthritis} = \frac{78 + 21 + 23 + 70}{101 + 109} = 0.91$$

$$\text{Sensitivity of three or more criteria for Probable or Definite Rheumatoid Arthritis} = \frac{70 + 30 + 18 + 85}{109 + 122} = 0.88$$

$$\text{Specificity of three or more criteria for Probable or Definite Rheumatoid Arthritis} = \frac{78}{101} = 0.77$$

excluded to lessen the likelihood of false inclusion of patients with the characteristic symmetrical terminal phalangeal joint involvement of degenerative joint disease. The presence of x-ray abnormalities characteristic of degenerative joint disease will not satisfy the criterion, but the presence of such x-ray changes will not exclude a patient from any of the categories of rheumatoid arthritis. It is important not to exclude a patient who has rheumatoid arthritis because he also has degenerative joint disease,—an error that is commonly made. Uncomplicated degenerative joint disease is excluded, we hope, by the rigid criteria (soft tissue swelling; symmetry—not limited to the terminal phalangeal joints; nodules; laboratory findings). Of the abnormalities in synovial fluid, the nature of the mucin precipitate is the most characteristic and most easily determined. Other abnormalities, especially increased activity of aminotripeptidase or betagluconidase, will add weight to the diagnosis, but are not included as specific criteria.

In all respects the criteria for possible rheumatoid arthritis are less strict. The required duration of symptoms is reduced to 3 weeks. A history, rather than observation of joint swelling, is adequate. Non-specific laboratory abnormality such as elevated sedimentation rate, is acceptable. Iritis was included as a criterion because of the relative frequency with which rheumatoid arthritis is the cause. Pericarditis, myocarditis, and pleurisy were omitted because they are more frequently due to other diseases than to rheumatoid arthritis, and would lead to the false inclusion of many patients.

Thus, the criteria were established. Since, however, similar combinations of findings occur in many other rheumatic diseases, the latter can be excluded only by specifically listing them as exclusions. In some cases it is possible that patients with one of these other diseases, for instance, one of the generalized connective tissue diseases other than rheumatoid arthritis or other rheumatic disease such as gout, may be thought to have rheumatoid arthritis also. For example, a patient with a history suggesting rheumatic fever and with physical findings of mitral and aortic valvular disease may also have a recent history and findings of definite rheumatoid arthritis. In such a situation, however, it seems wisest not to include the patient in a study of rheumatoid arthritis but to classify him separately and compare as desired. On the other hand, patients with rheumatoid spondylitis (x-ray changes in sacro-iliac joints or persistent limitation of motion of any region of the spine not due to another form of spinal disease), or with psoriasis, or with ulcerative colitis, or with onset under the age of 12, are to be included in the

rheumatoid groups if they satisfy the criteria, but they should be listed separately and the results of studies pertaining to them should be given separately.

The exclusions may rule out a few cases of rheumatoid arthritis, but this, we think, will rarely occur and will not be as serious as the inclusion of more patients who do not have rheumatoid arthritis. The exclusions need not be discussed in detail—in general, the clinical findings or picture are so well known that no questions will arise. Some have questioned the exclusion of the “L.E.” cell. There is a difference of opinion as to the specificity of this test. Some physicians think that one L.E. cell proves the diagnosis of disseminated lupus erythematosus and rules out rheumatoid arthritis, but many others think that L.E. cells may be found in 3 to 5 per cent. of rheumatoid patients (McCoy, Patterson, and Freyberg, 1955). However, since all apparently agree that a *high* concentration of cells proves disseminated lupus, four cells in two smears with the heparin method incubated not over 2 hrs are adequate to exclude a patient from the rheumatoid groups.

The present criteria are as follows:

I (A). DEFINITE RHEUMATOID ARTHRITIS.—This diagnosis requires five of the following criteria and total duration of joint symptoms must be at least 6 weeks. (Any one of the features listed in Section II will exclude a patient from this category.)

1. Morning stiffness.
2. Pain on motion or tenderness in at least one joint (observed by a physician).
3. Swelling (soft tissue thickening or fluid—not bony overgrowth alone) in at least one joint (observed by a physician).
4. Swelling (observed by a physician) of at least one other joint (any interval free of joint symptoms between the two joint involvements may not be more than 3 months).
5. Symmetrical joint swelling (observed by a physician) with simultaneous involvement of the same joint on both sides of the body (bilateral involvement of mid-phalangeal, metacarpo-phalangeal or metatarso-phalangeal joints is acceptable without absolute symmetry). Terminal phalangeal joint involvement will not satisfy this criterion.
6. Subcutaneous nodules (observed by a physician) (over bony prominences, on extensor surfaces or in juxta-articular regions).
7. X-ray changes typical of rheumatoid arthritis (which must include at least bony decalcification localized to or greatest around the involved joints and not just degenerative changes)—degenerative

changes do not exclude patients from the group of rheumatoid arthritis.

8. Positive sheep cell agglutination (Rose, Ragan, Pearce, and Lipman, 1948; or Heller, Jacobson, and Kolodny, 1949), or positive streptococcal agglutination test.
9. Poor mucin precipitate from synovial fluid (with shreds and cloudy solution).
10. Characteristic histological changes in synovial membrane with three or more of the following: marked villous hypertrophy; proliferation of superficial synovial cells often with palisading; marked infiltration of chronic inflammatory cells (lymphocytes or plasma cells predominating) with tendency to form "lymphoid nodules"; deposition of compact fibrin, either on surface or interstitially; foci of cell necrosis.
11. Characteristic histological changes in nodules showing granulomatous foci with central zones of cell necrosis, surrounded by proliferated fixed cells, and peripheral fibrosis and chronic inflammatory cell infiltration, predominantly perivascular.

I (B). **PROBABLE RHEUMATOID ARTHRITIS.**—This diagnosis requires three of the above criteria and total duration of joint symptoms must be at least 4 weeks. (Any one of the features listed in Section II will exclude a patient from this category.)

I (C). **POSSIBLE RHEUMATOID ARTHRITIS.**—This diagnosis requires two of the following criteria. (Any one of the features listed in Section II will exclude a patient from this category.)

1. Morning stiffness.
2. Tenderness or pain on motion (observed by a physician) with history of recurrence, or persistence for 3 weeks.
3. History or observation of joint swelling.
4. Subcutaneous nodules (observed by a physician).
5. Elevated erythrocyte sedimentation rate or C-reactive protein.
6. Iritis.

II. EXCLUSIONS

1. The typical rash of *disseminated lupus erythematosus* (with butterfly distribution, follicle plugging, and areas of atrophy).
2. High concentration of *lupus erythematosus cells* (four or more in two smears prepared from heparinized blood incubated not over 2 hrs).
3. Histological evidence of *periarteritis nodosa* with segmental necrosis of arteries associated with nodular leucocytic infiltration extending perivascularly and tending to include many eosinophils.
4. Weakness of neck, trunk, and pharyngeal muscles or persistent muscle swelling of *dermatomyositis*.

5. *Definite scleroderma* (not limited to the fingers).
6. Clinical picture characteristic of *rheumatic fever* with migratory joint involvement and evidence of endocarditis, especially if accompanied by subcutaneous nodules or erythema marginatum or chorea. (An elevated antistreptolysin titre will not rule out the diagnosis of rheumatoid arthritis.)
7. A clinical picture characteristic of *gouty arthritis* with acute attacks of swelling, redness, and pain in one or more joints, especially if relieved by colchicine.
8. Tophi.
9. A clinical picture characteristic of acute *infectious arthritis* of bacterial or virus origin with an acute focus of infection or in close association with a disease of known infectious origin; chills; fever; and an acute joint involvement, usually migratory initially (especially if there are organisms in the joint fluid or response to antibiotic therapy).
10. *Tubercle bacilli* in joints or histological evidence of joint tuberculosis.
11. A clinical picture characteristic of *Reiter's syndrome* with urethritis and conjunctivitis associated with acute joint involvement, usually migratory initially.
12. A clinical picture characteristic of the *shoulder-hand syndrome* with unilateral involvement of shoulder and hand, with diffuse swelling of the hand followed by atrophy and contractures.
13. A clinical picture characteristic of *hypertrophic pulmonary osteoarthropathy* with clubbing of fingers and/or hypertrophic periostitis along the shafts of the long bones, especially if an intrapulmonary lesion is present.
14. A clinical picture characteristic of *neuroarthropathy* with condensation and destruction of bones of involved joints and with associated neurological findings.
15. *Homogentisic acid* in the urine detectable grossly with alkalization.
16. Histological evidence of *sarcoid* or positive Kveim test.
17. *Multiple myeloma* as evidenced by marked increase in plasma cells in the bone marrow, or Bence-Jones protein in the urine.
18. Characteristic skin lesions of *erythema nodosum*.
19. *Leukemia* or *lymphoma* with characteristic cells in peripheral blood, bone marrow or tissues.

These tentative criteria are presented now for general use and evaluation. The necessity for changes to modify the criteria or clarify the statements will become apparent as they are used. The criteria should be officially reviewed within 2 years

and revised as necessary. However, it is our hope that, even in the present form, they will aid in making it apparent to all just what cases are included in any group of rheumatoid patients that is discussed or reported.

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Critères diagnostiques proposés pour l'arthrite rhumatismale

Compte-rendu d'une étude effectuée par un Comité de
American Rheumatism Association

Les critères actuels sont les suivants:

I (A). ARTHRITE RHUMATISMALE ÉTABLIE.—Ce diagnostic nécessite cinq des critères suivants et la durée totale des symptômes articulaires doit être au moins de six semaines. (L'un quelconque des caractères énumérés dans la Section II exclura le malade de cette catégorie).

1. Raideur matinale.
2. Mouvement douloureux ou sensibilité dans une articulation au moins (observés par un médecin).
3. Enflure (épaississement de tissu mou ou liquide et non excroissance osseuse seule) dans une articulation au moins (observée par un médecin).
4. Enflure (observée par un médecin) d'au moins une autre articulation (toute période de temps sans symptôme articulaire, s'écoulant entre les implications des deux articulations, ne doit pas dépasser trois mois).
5. Enflure articulaire symétrique (observée par un médecin) avec attaque simultanée de la même articulation sur les deux côtés du corps (l'attaque bilatérale des articulations mi-phalangiennes, métacarpo-phalangiennes ou métatarso-phalangiennes est acceptable sans symétrie absolue). L'attaque de l'articulation phalangienne terminale ne satisfait pas ce critère.
6. Nodules sous-cutanés (observés par un médecin) (sue les proéminences osseuses, dans la région des extenseurs ou juxta-articulaire).
7. Altérations radiologiques typiques d'arthrite rhumatismale (qui doivent comprendre au moins une décalcification osseuse localisée ou prédominante aux articulations considérées, et pas seulement des signes de dégénérescence)—les signes de dégénérescence n'excluent pas les malades du groupe d'arthrite rhumatismale.
8. Agglutination positive des cellules de mouton (Rose, Ragan, Pearce, et Lipman, 1948; ou Heller, Jacobson, et Kolodny, 1949), ou réaction positive d'agglutination streptococcique.
9. Faible précipité de mucine du liquide synovial (avec fibres et solution trouble).
10. Altérations histologiques caractéristiques de la membrane synoviale, dont trois ou plus, des suivants: hypertrophie vilieuse marquée; pro-

lifération des cellules synoviales superficielles, souvent avec palissage; infiltration marquée de cellules inflammatoires chroniques (lymphocytes ou cellules du plasma, prédominant) avec tendance à former des "nodules lymphoïdes"; dépôt de fibrine compacte, soit en surface, soit interstitiellement; foyers de nécrose cellulaire.

11. Altérations histologiques caractéristiques dans les nodules, faisant apparaître des foyers granulomateux avec des zones centrales de nécrose cellulaire, entourées de cellules proliférantes fixes, de la fibrose périphérique et de l'infiltration cellulaire inflammatoire chronique, essentiellement périvasculaire.

I (B). ARTHRITE RHUMATISMALE PROBABLE.—Ce diagnostic nécessite trois des critères ci-dessus et la durée totale des symptômes articulaires doit être d'au moins quatre semaines. (L'un quelconque des caractères énumérés à la Section II, exclura un malade de cette catégorie.)

I (C). ARTHRITE RHUMATISMALE POSSIBLE.—Ce diagnostic nécessite deux des critères suivants (l'un quelconque des caractères énumérés à la Section II exclura un malade de cette catégorie):

1. Raideur matinale.
2. Sensibilité ou mouvement douloureux (observés par un médecin) avec antécédants, ou persistance durant trois semaines.
3. Antécédant ou constatation d'enflure articulaire.
4. Nodules sous-cutanés (observés par un médecin).
5. Vitesse de sédimentation érythrocytaire élevée ou présence de protéine C-reactive.
6. Irite.

II. EXCLUSIONS

1. L'éruption typique du *lupus érythémateux disséminé* (avec répartition en papillon, bouchage folliculaire et plaques d'atrophie).
2. Haute concentration de cellules de *lupus érythémateux* (quatre ou plus, en deux frottis préparés avec du sang héparinisé, incubés pas plus de deux heures).
3. Signes histologiques de *périartérite noueuse* avec nécrose segmentaire des artères associée à une infiltration nodulaire leucocytaire s'étendant périvasculairement et tendant à inclure de nombreux éosinophiles.
4. Faiblesse des muscles du cou, du tronc et du pharynx ou enflure musculaire persistante de la *dermatomyosite*.
5. *Sclérodémie* établie (non limitée aux doigts).
6. Tableau clinique caractéristique du *rhumatisme articulaire aigu* avec implication articulaire migrante et signes d'endocardite, surtout en présence de nodules sous-cutanés, d'érythème marginé ou de chorée. (Un titre élevé d'anti-streptolysine n'éliminera pas le diagnostic de l'arthrite rhumatismale).
7. Un tableau clinique caractéristique de l'*arthrite goutteuse* avec attaques aiguës d'enflure, de rougeur et de douleur dans une ou plusieurs articulations, en particulier quand ceci est soulagé par la colchicine.
8. Tophi.
9. Un tableau clinique caractéristique d'*arthrite infectieuse* auguë d'origine bactérienne ou à virus, avec un foyer aigu d'infection ou en association

- étroite avec une maladie d'origine infectieuse connue; rhumes; fièvre; et une attaque articulaire aiguë, habituellement d'abord migrante (en particulier s'il se trouve des organismes dans le liquide articulaire ou si l'on obtient une réponse à la thérapie antibiotique).
10. *Bacilles de Koch* dans les articulations ou signes histologiques de tuberculose articulaire.
 11. Un tableau clinique caractéristique du *syndrome de Reiter* avec urethrite et conjonctivite associées à une attaque articulaire aiguë d'abord migrante.
 12. Un tableau clinique caractéristique du *syndrome épaule-main*, avec implication unilatérale de l'épaule et de la main, avec enflure diffuse de la main, suivie d'atrophie et de contractures.
 13. Un tableau clinique caractéristique de l'*ostéo-arthropathie pulmonaire hypertrophique* avec doigts noueux et/ou périostite hypertrophique le long des diaphyses, en particulier en présence d'une lésion intrapulmonaire.
 14. Un tableau clinique caractéristique de *neuroarthropathie* avec condensation et destruction osseuse des articulations impliquées et avec signes neurologiques associés.
 15. Acide *homogénitique* dans l'urine, détectable grossièrement par alcalinisation.
 16. Signes histologiques de *sarcoïde* ou épreuve positive de Kveim.
 17. *Multiple myelome* mis en évidence par un accroissement marqué des cellules plasmatiques dans la moëlle osseuse, ou la protéine de Bence-Jones dans l'urine.
 18. Lésions de la peau, caractéristiques de l'*érythème noueux*.
 19. *Leucémie* ou *lymphome* avec cellules caractéristiques dans le sang périphérique, la moëlle osseuse ou les tissus.

Criterios diagnósticos propuestos para la artritis reumatoide

Informe de un estudio realizado por un Comité de la *American Rheumatism Association*

Los criterios actuales son los siguientes:

I (A). ARTRITIS REUMATOIDE ESTABLECIDA.—Este diagnóstico necesita cinco criterios siguientes y la duración total de los síntomas articulares debe ser al menos de seis semanas. (Cualquiera de los rasgos enumerados en la Sección II excluirá el enfermo de esta categoría).

1. Rigidez matinal.
2. Movimiento doloroso o sensibilidad en una articulación al menos (observados por un médico).
3. Hinchazón (espesamiento de tejido blando o líquido, pero no acrecentamiento óseo sólo) en una articulación al menos (observada por un médico).
4. Hinchazón (observada por un médico) de al menos una otra articulación (cualquier período de tiempo sin síntomas articulares entre las implicaciones de dos articulaciones no debe rebasar tres meses).
5. Hinchazón articular simétrica (observada por un médico) con implicación simultánea de la misma articulación de ambos lados del cuerpo (la implicación bilateral de las articulaciones falangeas medias, metacarpo-falangeas o metatarso-falangeas es aceptable sin simetría absoluta). La implicación de la articulación falangea terminal no satisface este criterio.

6. Nódulos subcutáneos (observados por un médico) (sobre prominencias óseas, en la región de los extensores o yuxta-articular).
7. Alteraciones radiológicas típicas de artritis reumatoide (que deben comprender al menos una decalcificación ósea localizada o predominante en las articulaciones implicadas y no sólo alteraciones degenerativas)—las alteraciones degenerativas no excluyen los enfermos del grupo de artritis reumatoide.
8. Aglutinación positiva de células de oveja (Rose, Ragan, Pearce, and Lipman, 1948; o Heller, Jacobson, and Kolodny, 1949) o reacción positiva de aglutinación estreptococcica.
9. Precipitado débil de mucina del líquido sinovial (con trizas y solución turbia).
10. Alteraciones histológicas características de la membrana sinovial, con tres o más de los siguientes: hipertrofia vellosa acentuada; proliferación de las células sinoviales superficiales, a menudo con palizada; infiltración marcada de células inflamatorias crónicas (con linfocitos o células plasmáticas predominantes) con tendencia a formar "nódulos linfoides"; depósito de fibrina compacta, superficial o intersticialmente; focos de necrosis celular.
11. Alteraciones histológicas características en los nódulos, mostrando focos granulomatosos con zonas centrales de necrosis celular, rodeadas de células proliferantes fijas, y una fibrosis periférica así como infiltración celular inflamatoria crónica, esencialmente perivascular.

I (B). ARTRITIS REUMATOIDE PROBABLE.—Este diagnóstico necesita tres de los criterios sobredichos y la duración total de los síntomas articulares debe ser de al menos cuatro semanas. (Cualquiera de los rasgos enumerados en la Sección II excluye un enfermo de esta categoría).

I (C). ARTRITIS REUMATOIDE POSIBLE.—Este diagnóstico necesita dos de los criterios siguientes (cualquiera de los rasgos enumerados en la Sección II excluye un enfermo de esta categoría):

1. Rigidez matinal.
2. Sensibilidad o movimiento doloroso (observados por un médico) antecedentes o persistentes durante tres semanas.
3. Antecedentes u observación de hinchazón articular.
4. Nódulos subcutáneos (observados por un médico).
5. Velocidad de sedimentación eritrocitaria alzada o presencia de proteína C-reactiva.
6. Iritis.

II. EXCLUSIONES

1. Erupción típica de *lupus eritematoso disseminado* (con distribución en mariposa, obturación folicular y placas de atrofia).
2. Fuerte concentración de células de *lupus eritematoso* (cuatro o más, en dos frotis preparados con sangre heparinizada, incubados no más de dos horas).
3. Signos histológicos de *periarteritis nodosa* con necrosis segmentaria de las arterias asociada a una infiltración nodular leucocitaria con extensión perivascular y con tendencia a incluir numerosos eosinófilos.
4. Debilidad muscular del cuello, del tronco y de la faringe o hinchazón muscular persistente de la *dermatomiositis*.

5. *Eslodermia* establecida (no limitada a los dedos).
6. Cuadro clínico característico del *reumatismo poliarticular agudo* con implicación articular migratoria y signos de endocarditis, particularmente en presencia de nódulos subcutáneos, de eritema marginato o de corea. (Una cifra alta de antistreptolisina no elimina el diagnóstico de artritis reumatoide).
7. Un cuadro característico de la *arthritis gotosa*, con ataques agudos de hinchazón, de rubor y de dolor en una o más articulaciones, en particular cuando hay alivio con colchicina.
8. Tofos.
9. Un cuadro clínico característico de la *arthritis infecciosa* aguda de origen bacteriano o debida a un virus, con un foco agudo de infección o en asociación estrecha con una enfermedad de origen infeccioso conocido; resfrios; fiebre; y un ataque articular agudo, generalmente migratorio al principio (en particular, cuando se encuentran organismos en el líquido articular o cuando hay respuesta a la terapia antibiótica).
10. *Bacilos tuberculosos* en las articulaciones o signos histológicos de tuberculosis articular.
11. Un cuadro clínico característico del *síndrome de Reiter* con uretritis y conjuntivitis, asociadas a un ataque articular agudo, migratorio al principio.
12. Un cuadro clínico característico del *síndrome hombro-mano*, con implicación unilateral del hombro y de la mano, con hinchazón difusa de la mano, seguida de atrofia y de contracturas.
13. Un cuadro clínico característico de la *osteoartritis pulmonar hipertrófica* con dedos nodosos y/o periostitis hipertrófica a lo largo de las diáfisis, en particular en presencia de una lesión intrapulmonar.
14. Un cuadro clínico característico de *neuroartropatía* con condensación y destrucción ósea de las articulaciones implicadas y con signos neurológicos asociados.
15. Ácido *homogentísico* en la orina, detectable groseramente por alcalinización.
16. Signos histológicos de *sarcoide* o reacción positiva de Kveim.
17. *Mieloma múltiple*, evidenciado por un crecimiento marcado de células plasmáticas en la médula ósea, o la proteína de Bence-Jones en la orina.
18. Lesiones de la piel características del *eritema nodoso*.
19. *Leucemia* o *linfoma* con células características en la sangre periférica, la médula ósea o los tejidos.