

THE POTENTIAL REVERSIBILITY OF RHEUMATOID ARTHRITIS*

BY

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Rheumatoid arthritis has two sharply contrasting characteristics, that of potential chronicity and that of potential reversibility. The potential chronicity of rheumatoid arthritis is all too well known. Although only potential and not absolute, this characteristic has been so distressing and prominent that it has dominated medical literature for a century, and is reflected in the nomenclature and definitions of the disease and in the general similitude of textbook teachings on prognosis.

So graphically has the chronic progressive form of this disease been described that it has become almost indelibly impressed on the minds of physicians and laymen alike as the archetype, not only of rheumatoid arthritis, but of all the arthritides. Hence to most laymen a diagnosis of arthritis arouses fear of the rheumatoid type. The term "rheumatoid arthritis" has come to imply more or less relentless progression to crippledom. Hence many physicians regard arthritis which does not last long but remits more or less completely after a few weeks or months, as being not rheumatoid arthritis, but a different form worthy of special designation, such as "focal arthritis" or "infective arthritis".

The contrasting characteristic of rheumatoid arthritis, its potential reversibility, has not been sufficiently described or appreciated, but to the clinical investigator it is much more important than is its potential chronicity. From the standpoint of pathogenesis rheumatoid arthritis involves two abnormal processes which must be separated distinctly: its pathologic physiology constitutes its "fire"; its pathologic anatomy represents the "ashes" of the disease. Its pathologic anatomy, of which we know something, is largely irreversible, but its pathologic physiology, of which we have known almost nothing, is potentially, and under certain circumstances, dramatically reversible.

By potential reversibility I refer to the inherent, but too often dormant, ability of the human body to correct (at least temporarily) the abnormal or pathologic physiology underlying rheumatoid

arthritis at any stage of the disease and to bring its active symptoms under control, in other words, to "put out the fire".

The inherent reversibility of rheumatoid arthritis may be activated spontaneously, therapeutically or accidentally.

Spontaneous Reversibility

Brief comments on the spontaneous reversibility of rheumatoid arthritis can be found here and there in the older medical literature. Garrod wrote in 1876: "A patient not uncommonly had threatenings of the disease a year or two previously, which passed off in a month or two; a second premonitory attack of a severer character may have succeeded the first and in its turn . . . may have again passed off; a few months more bring on a third attack which assumes a character of greater permanency." Others have noted that the disease may subside altogether when only a few joints have become involved.

Such statements are supported by modern clinical experiences. Bauer (1943) has stated, "Recovery from the first attack is often complete and the remission may last for months or even for years; the patient may have a number of attacks before the disease becomes chronic." Ropes and Bauer (1945) say: "It seems probable that some patients have only one attack without subsequent exacerbation; the remission may last throughout life." Again, Ropes (1944) says, "The atypical milder form is equally characteristic of the disease and probably more common" than the supposedly typical chronic progressive form.

Therapeutic Reversibility

The ability to induce slowly remissions of varying degrees and to stop the disease in time has been claimed for a host of now-discarded remedies. Most of these remissions were probably spontaneous, not therapeutically induced. To-day many rheumatologists hold the opinion that gold salts induce remissions more often and more completely than any other single therapeutic agent. Even so,

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truly satisfactory results are in the minority, often appear tardily, and may be disappointingly transient.

An ideal remedy would provoke regularly remissions which would be prompt, "complete", and permanent. Far inferior to such an ideal remedy, but of considerable interest to me as an investigator have been the curious reactions of many patients with rheumatoid arthritis to the following agents: foreign proteins (for example, triple typhoid vaccine), starvation, and surgery.

Febrile Reactions to Foreign Protein.—Many years ago as a neophyte in rheumatology I witnessed an event which I have never been able to discount or forget. On our hospital service we were then more or less habitually inducing febrile reactions to triple typhoid vaccine, generally with disappointing or equivocal results. But one day a badly disabled rheumatoid patient reacted promptly and with unusual effectiveness; seemingly a remission of marked degree had been induced. The remission was largely sustained, and through subsequent years I have seen this patient frequently and he has had little or no arthritic activity. Such experiences have been few, but not uncommonly we have been tantalized by seeing brief periods of marked improvement after such reactions so that for a few days the patient thought himself "practically well". Later when his brief respite was over, he would chide us ruefully, "Why can't you prolong that kind of relief?" The cause for such relief and the reason for its rapid appearance and disappearance have remained unknown.

Starvation.—In 1910 Guelpa introduced a new treatment which he considered of marked value in several conditions, notably diabetes and certain forms of rheumatism or arthritis. The treatment consisted of absolute or relative starvation for variable periods of time. His results were poorly documented and largely unconvincing. But since then physicians of critical judgment have noted occasional instances in which rheumatoid arthritis seemed actually to retreat or disappear temporarily under conditions of starvation. As a practical type of treatment or even as a promising research venture, starvation lacked form and substance. Hence it has had few respectable protagonists. In the United States between 1920 and 1930 it was espoused by faddists at two or three so-called health schools.

Between 1925 and 1935 I saw at the Mayo Clinic 5 patients who, having had rheumatoid arthritis for from two to eight years, had fasted a total of fourteen times for periods ranging from three to twenty-one days. Marked relief presumably resulted after two or three days of fasting, but disappeared as soon

as the fast was discontinued. Willing to demonstrate the phenomenon to me, one of these patients fasted for eight days and appeared to obtain notable subjective relief. Certain joints became painless, but an ankle remained tender, and the sedimentation rate was not favourably affected.

Surgery.—The twentieth century to date has been notable for the number of surgical procedures advocated for rheumatoid arthritis. How often has *bona fide*, if transient, relief appeared to follow tonsillectomy, only to fade after two or three weeks! In the same category probably belong the supposed results of hysterectomy, bone-puncture, certain operations on the colon, thyroidectomy, cholecystectomy, parathyroidectomy, splenectomy, sympathectomy, and others. That such diverse, unrelated procedures are commonly followed by transient amelioration of rheumatoid arthritis will be admitted by most experienced observers. But how can each of these procedures *specifically* affect the entity, rheumatoid arthritis? None of these procedures has, in my opinion, any specific merit. But they may possess some common denominator, in that they may motivate a biologic reaction which, though helpful to the patient, bears no inseparable relationship to the surgical manipulation momentarily chosen as the agent of relief.

Considered responsible for this transient, sometimes relatively prolonged postoperative relief have been each of the following: the removal of foci of infection, an improved articular circulation, the correction of some endocrine abnormality, postoperative rest in bed, postoperative shock, postoperative fever or starvation, or the chemical effect of anaesthesia.

In 1930 at the Mayo Clinic we studied the analgesia and the improved circulation which often followed lumbar sympathectomy for the relief of rheumatoid arthritis of the lower extremities. But since the upper extremities, whose sympathetic nerve supply was surgically untouched, were often temporarily relieved almost as much as the surgically affected lower extremities, we concluded that the general anaesthesia incident to the surgical procedure may have been important and that the common denominator of diverse surgery might concern the anaesthesia more than any particular operative procedure. Later, at the Mayo Clinic, Slocumb (personal communication) investigated the effect of various anaesthetic agents given alone to several volunteers with rheumatoid arthritis. Of these patients who were anaesthetized for fifteen to thirty minutes, 60 per cent. had definite objective and subjective articular improvement for a week or more, an additional 20 per cent. had definite

subjective improvement (with or without objective improvement) for only two or three days and the remaining 20 per cent. were unaffected. When relief occurred, the patient noted it as soon as he wakened from the anaesthesia, and it resulted even though no febrile reaction accompanied the anaesthesia.

Accidental Reversibility

Much more dramatic and interesting than the relatively feeble remissions induced by foreign-protein reactions, starvation, or surgery, or even than the sturdier remissions induced by chrysotherapy, are those which may arise accidentally, appearing in connexion with coincidental pregnancy or jaundice. These two conditions are usually potent antagonists of rheumatoid arthritis. In the presence of either one rheumatoid arthritis finds it difficult to progress, or indeed to do otherwise than to beat a rather precipitous retreat.

Remissions Induced by Pregnancy.—For years observers, noting the greater incidence of rheumatoid arthritis in women, especially in those between 20 and 40 years of age, have speculated as to the relation of this disease to menses, pregnancy, and the postpartum state. The literature of the past century contains scattered references to the subject, generally only a sentence here or a paragraph there. Between 1845 and 1938 opinions regarding the effect of pregnancy were contradictory. It was variously stated that rheumatoid arthritis may be precipitated by, or first appear during pregnancy, be aggravated by pregnancy, be unaffected thereby, or be partially or completely relieved during pregnancy. No critical investigation was ever undertaken to clarify these confusions.

Having noted on many occasions an amelioration of rheumatoid arthritis during pregnancy and conjecturing that this phenomenon was analogous to, if not identical with, that which may occur in the jaundiced arthritic patient, I reported (Hench, 1938a) observations on the effect of thirty-four pregnancies on twenty patients with rheumatoid arthritis. Thirty of the thirty-four pregnancies produced marked or complete remission of the arthritis. Three of the four ineffectual pregnancies were presumably normal; the fourth was an ineffectual tubal pregnancy terminated at its sixth week in a woman who had experienced the phenomenon of relief early in four of her five (four intra-uterine, one tubal) pregnancies even though her pregnancies proceeded to term only once.

Since this report Slocumb, Polley, and I have recorded the results of pregnancy in a total of about 150 rheumatoid patients. A preliminary summary

indicates that most of these patients were markedly improved or completely relieved during normal pregnancy. A few received little or no relief from what were apparently normal pregnancies. Rheumatoid arthritis rarely began during pregnancy; in exceptional cases it made a brief appearance during pregnancy, then quickly retreated to return at a more favourable (postpartum) period. Rheumatoid patients relieved once by pregnancy were almost always relieved by subsequent intra-uterine pregnancies whether the latter were carried to term or ended (after the third month) by miscarriage or abortion. Some patients experienced relief with each of three to five pregnancies; one patient had relief with each of nine pregnancies.

Rheumatoid patients not relieved once by (normal?) intra-uterine pregnancy were usually not relieved by subsequent pregnancies. Most intra-uterine pregnancies produced amelioration. Some women with rheumatoid arthritis who habitually miscarried near the end of the second or third month of gestation, nonetheless had obtained marked or complete relief of articular symptoms about a month prior to the miscarriages. In certain others who tended to miscarry late in pregnancy, the phenomenon of relief was abnormal, tardy, or incomplete. Thus the early appearance of the phenomenon of relief of arthritis is no guarantee that the pregnancy will terminate normally, nor is what appears to be a normal pregnancy always associated with the phenomenon of relief. From our limited observations of such unusual cases we can perhaps conclude that a pregnancy may be constitutionally (chemically) "abnormal" even though it is locally (intra-uterine) normal.

Articular amelioration began usually about the fourth to the sixth week of pregnancy, sometimes later. Relief began during the first trimester in about 90 per cent., in the second trimester in about 10 per cent. of the patients who had amelioration. In such cases articular pain usually disappeared completely, articular tenderness subsided notably or entirely, muscular stiffness disappeared or was notably lessened, and even articular swelling was reduced markedly, sometimes completely. The phenomenon of articular relief ended usually within one to seven weeks postpartum; in some cases between the eighth and twelfth week, and in a few four to twenty-four months after parturition.

Based on the experiences in the majority of the cases analysed to date, the phenomenon of relief can be expressed tentatively by the following formula: typical pattern of relief = 5 ± 1 week postconception to 4 ± 3 weeks postpartum. Each patient tended to exhibit a formula or pattern

of relief which was consistent for that individual. With certain variations, the formula of relief was fairly constant for more than half the entire group. But many others exhibited atypical patterns of relief. The postpartum return of articular symptoms did not appear to be governed by the length of time in bed, by the duration of lactation, or by the approach of the first postpartum menses.

Remissions Induced by Hepatitis with Jaundice.—The second and even more dramatic type of accidental remissions is motivated during the course of hepatitis with jaundice. The first experience of this kind came to my attention on April 1, 1929. Since then I (1933, 1934, 1938b, c, 1940) have studied this phenomenon as it occurred in twenty-five, and as it failed to occur in five more, jaundiced patients. Of these thirty patients with rheumatoid arthritis who had various types of spontaneous intercurrent jaundice twenty-five (83 per cent.) experienced marked or complete temporary remission of the arthritis irrespective of the concentrations of bilirubin in serum. When the level of serum bilirubin rose to more than 6 or 8 mg. per 100 c.cm., the phenomenon of relief almost always occurred (in twenty-five, or 96 per cent., of twenty-six such cases). When relief was induced, it was complete in 68 per cent., marked but incomplete in the rest.

Since my initial observations fifteen reports by others have concerned twenty-three jaundiced rheumatoid patients, twenty-two (96 per cent.) of whom obtained relief. Sometimes the intensity of the jaundice was not stated. Recently Holbrook (1948) collected from the literature and by questionnaires sent to certain rheumatologists a total of eighty-four cases of rheumatoid arthritis in which jaundice supervened. In fifty-four (64 per cent.) of these cases a marked remission occurred. Had this report concerned only those in which concentrations of serum bilirubin were more than 6 mg. per 100 c.cm., undoubtedly the percentage of cases in which jaundice was effective would have been notably higher.

Although a certain intensity of jaundice must be attained before the phenomenon of articular relief is activated, bilirubin is not the responsible agent. Several types of jaundice have shown themselves to be effective provided that the liver was damaged enough to produce a fairly notable bilirubinaemia of the direct-reacting type: so-called catarrhal jaundice; spontaneous intrahepatic jaundice; jaundice induced by cinchophen, by transfusions, by homologous serum therapy or by neoarsphenamine; and obstructive jaundice from stones or malignancy. Jaundice associated with chryso-

therapy has been effective in some cases, ineffective in others even in the presence of notable bilirubinaemia. Haemolytic jaundice appears to be ineffective. In haemolytic jaundice the serum bilirubin is of the indirect-reacting type and is rarely in notable concentrations. In my own cases the effective jaundice lasted an average of eight weeks. The articular remissions lasted from one and a half to eighty-two weeks. The remissions observed by others also varied in length, from one month to two years.

Significance of the Potential Reversibility.—Such observations on the potential reversibility of rheumatoid arthritis have caused a revision of our thinking on the diagnosis, aetiology, prognosis, and treatment of the disease. Since rheumatoid arthritis is sometimes reversible even in its late progressive stages, it should be regarded as potentially reversible at any stage, and probably more reversible in its early stages. That the latter is true is shown by the fact that most remedies are more effective in early stages.

A diagnosis of atypical rheumatoid arthritis should be considered more often in cases of: non-traumatic hydrops of a knee or knees, lasting a few weeks and disappearing without residues; polyarticular or oligo-articular asymmetrical involvement, or of non-traumatic chronic monoarthritis with no clinical evidence of tuberculosis; short afebrile or febrile bouts of arthritis which are precipitated by certain acute infections and which may disappear fairly soon without articular residues, and transient articular swellings which last a few days or weeks and affect one joint one time, another joint the next time.

Any theory on the aetiology of rheumatoid arthritis must take into account the powerful ameliorative influence of jaundice and pregnancy. It has become increasingly difficult for me to harmonize the microbic theory with such amelioration. It has become easier for me to consider that rheumatoid arthritis may represent, not a microbic disease, but a basic biochemical disturbance of unknown type which is accidentally and transiently corrected by some incidental biologic change common to a number of apparently unrelated events, most notable of which are jaundice and pregnancy.

Since within the patient who has even the severest rheumatoid arthritis powerful corrective forces lie dormant awaiting the proper stimulation, the pessimism regarding prognosis, still all too prevalent, should be abandoned. The problems of practical and investigative therapeutics should be approached with new vigour and new points of view. Perhaps

the removal of a focus of infection, never a "specific remedy", is sometimes beneficial because it may initiate a helpful biochemical reaction which has nothing to do with germs or immunity. The results of starvation and anaesthesia should be appraised by newer scientific methods. Perhaps an attempt to discover some biochemical denominator common to all these procedures, but especially to jaundice and pregnancy, would be a guide to an improved treatment for rheumatoid arthritis.

Therapeutic Investigations Based on these Observations

Since the ameliorating effects of jaundice and pregnancy were first described, attempts have been made to obtain similar relief by several related procedures. Some physicians, impressed by the effects of pregnancy, and unaware of, or less impressed by the effects of jaundice, have investigated measures related to pregnancy. Other physicians, intrigued by the effects of jaundice, but unaware of, or unattracted by those of pregnancy, have confined their investigations to measures allied to jaundice.

Therapeutic Pregnancy.—Several of my patients, temporarily relieved by one pregnancy, deliberately became pregnant again in the hope that the effect might finally "stick". Most of them were again temporarily relieved; none were cured. Recently Holbrook recommended pregnancy in certain cases of progressive rheumatoid arthritis. In my opinion, a decision favouring further pregnancies should be based on factors other than the desire for transient articular relief, such factors being the parents' desire for more children, and their physical and financial ability to care for them in the face of the probability that the arthritis will return after childbirth.

Female Hormones.—Hoping to reproduce the beneficial effects of pregnancy, several physicians have administered to non-pregnant women with rheumatoid arthritis fairly large doses of female hormones. The results to date have been almost uniformly disappointing.

To three or four volunteers with rheumatoid arthritis, Bauer (personal communication) recently gave the daily output of urine from women in the last trimester of pregnancy. The urine was passed through a Berkefeld filter, disguised as to taste, and given in "cocktail" form in repeated doses daily for four to eight weeks. No beneficial or harmful effects were noted.

Transfusions of Blood from Pregnant Women.—In 1941 and 1947 Barsi-Basch reported that he had induced prolonged remissions or marked improvement in 64 per cent. of twenty-eight rheumatoid

patients to whom he had given small transfusions of blood from pregnant women. In contrast to these results have been those noted in five other reports which concerned a total of eighty-five patients, none of whom were cured by transfusions of such blood. Although a few appeared to be somewhat relieved for a while, the majority received little or no relief.

Having noted several years ago (Hench, 1938b) that transfusions of blood of deeply jaundiced persons did not benefit a few rheumatoid volunteers and that no antirheumatic "substance X" could apparently be transferred passively thereby, I discarded the idea of using blood from pregnant women also. However, my associate, Dr. Slocumb, did administer repeatedly to one of our patients with severe rheumatoid arthritis small amounts of serum from a pregnant woman, without significant results. Having frequently seen rheumatoid arthritis that had been relieved by pregnancy return after parturition, I find it difficult to understand how the method of Barsi-Basch can induce a prolonged remission or cure. If a pregnant woman is not cured of rheumatoid arthritis by the effects of thousands of cubic centimetres of her own (transiently effective) blood circulating within her body (and joints) for nine long months, how can that same or another woman, when non-pregnant, be cured by a few hundred cubic centimetres of the blood of another pregnant woman which can survive in the recipient for only a few weeks at most?

But the supposed results from transfusions of blood of pregnant women can be evaluated best by comparing them with those from transfusions of normal blood. During the last seventeen years this procedure has been occasionally recommended with mild enthusiasm by a few workers. Results have often been satisfactory but rarely dramatic. It can be concluded that transient benefit occasionally results from transfusions of blood whether from non-pregnant or pregnant donors. But so far the superiority of blood from pregnant donors remains to be proved.

Jaundice and Related Procedures.—Reported elsewhere (Hench, 1938b, c; 1940) as being ineffective were: bile salts given orally, synthetic bile salts (decholin) given orally or intravenously, human bile given by stomach tube, or bile given by proctoclysis, liver extracts given parenterally, cysteine, heparin, transfusions of blood of deeply jaundiced donors, high-fat diets given to induce hyperlipaemia or hypercholesterolaemia, and haemolytic jaundice induced by the oral administration of toluenediamine. Also generally ineffective was the hyperbilirubinaemia induced by the intravenous

administration of bilirubin alone or with decholin (Hench, 1938b, c; 1940; and Thompson and Wyatt, 1938). Of limited effectiveness but of considerable scientific interest have been the results of jaundice induced by the administration either of icterogenic serum or lactophenin to volunteers with rheumatoid arthritis.

Notable articular remissions were produced in thirty-three of forty arthritic patients given icterogenic serum to induce jaundice (MacCallum and Bradley, 1944; Gardner and others, 1945; Rennie and Fraser, 1946). The articular remissions were complete but transient in at least eleven of the thirty-three cases of effective jaundice. For the clinical investigator this type of jaundice has two great drawbacks: the percentage of successful inoculations is small (only 7 to 10 per cent.); the incubation period between inoculation and development of jaundice is long (27 to 131 days).

A more useful type of jaundice for the investigator is that induced by the oral administration of lactophenin as reported by Hanssen in 1942 and investigated by me. Jaundice, characterized by an effective bilirubinaemia of the direct-reacting type, was promptly induced by Hanssen in four of seven, by me in three of nine, arthritic volunteers. Whenever jaundice was produced, notable articular remissions occurred promptly. In one patient I induced jaundice with lactophenin twice with marked improvement of joints each time. Articular relief occurred with lower concentrations of bilirubinaemia than have usually been effective in spontaneous jaundice. But the articular remissions have not been permanent.

Comments on the Mechanism of Relief

In considering the probable mechanism of relief of rheumatoid arthritis from these diverse, seemingly unrelated agents, I will use an analogy. Diabetes of a certain patient could be "controlled" in 1920 by attention to diet, in 1922 by injections of a medicine (insulin), and perhaps in 1950 by the coincident and fortuitous appearance of an insulin-producing pancreatic tumor. Yet the agent in each of these apparently different mechanisms would be, of course, the same. The common denominator of diet, medicine, and tumour would be an equilibrium between the need and the supply of insulin.

It seems equally logical to suppose that the ultimate agent producing articular relief in jaundice is closely related to, if not identical with, that responsible for articular relief in pregnancy. If so, the responsible agent is neither bilirubin nor a unisexual (female) hormone.

My use of lactophenin jaundice has been, not

TABLE
AMELIORATION BY PREGNANCY OR JAUNDICE

Conditions	Relieved by	
	Pregnancy	Jaundice
Rheumatoid arthritis	+	+
Chronic arthritis with psoriasis (skin unrelieved)		+
Psoriatic arthritis (skin unrelieved)	+	++
Psoriasis (no arthritis)	++	
Intermittent hydrops, "true" ..	+	
Intermittent hydrops, symptomatic, with rheumatoid arthritis	+	
Fibrositis, primary	+	+
Asthma	++	++
Migraine	++	+
Hay fever	++	+
Addison's disease	++	
Myasthenia gravis	++	

+ Cases encountered by P.S.H.
++ Cases reported by others.

an end in itself, but a means to an end. By studying the biochemical alterations which occur during and after the articular remissions produced by induced jaundice, and by comparing them to those which may be found to coincide regularly with the pattern of articular relief during pregnancy, perhaps we may find a clue to some factor of prime aetiological and therapeutic significance. If this antirheumatic "substance X" be a biologic compound specific in nature and function, as it may well be, we have had no clue as to the organ of its origin.

Other Conditions Ameliorated by Pregnancy or Jaundice or Both.—Certain other conditions besides rheumatoid arthritis and primary fibrositis are often, but not always, relieved by pregnancy or jaundice or both (see Table) (Hench, 1940). Obviously, the phenomenon of relief is not disease-specific. It appears to be group-specific which should lead to an increase, rather than a decrease, in efforts to elucidate the mechanisms of relief.

Although it seems logical to assume that jaundice and pregnancy may motivate the same mechanism of relief so far as rheumatoid arthritis is concerned, it does not necessarily follow that all the conditions listed in the Table are influenced in an identical way. Pregnancy and jaundice are accompanied by a multitude of specific and incidental (non-specific) biochemical alterations. One specific or non-specific deviation may benefit patients with one disease, another deviation may effect another disease. But attention to this list may be a guide in future investigations.

Conclusion

These clinical and investigative observations have fortified my belief that rheumatoid arthritis is not necessarily a relentless, chronic progressive condition which will never have a truly satisfactory, rapid method of control. Rheumatoid arthritis is even now potentially, rapidly reversible at any stage of the disease and eventually will become therapeutically reversible or rapidly controllable. The powerful corrective forces which lie dormant within every patient with this disease await the superior stimulus of the future. Meanwhile, they can be set in motion, inconstantly and apparently inconsistently, in a variety of ways: spontaneously, accidentally, and therapeutically.

Chrysotherapy will induce striking remissions in only about 10 or 15 per cent. of cases. From a combined programme of therapy (gold, physical therapy, removal of foci of infection, rest, and nutritious diet) striking results are promptly obtained in not more than about 15 per cent. of cases.

Compare the potency, or relative impotency, of these remedies, the best we have, with that inherent in jaundice or pregnancy which induces marked articular remissions in about 60 to 90 per cent. of cases. Obviously there exists a great unrealized potential for the relief of rheumatoid arthritis, a potential we must bring to reality. Rheumatoid arthritis does have its "Achilles' heel" against which new offensives must be directed. Let us exploit the demonstrated points of weakness with renewed optimism and zeal.

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La Reversibilité Potentielle de l'Arthrite Rhumatismale

CONCLUSION

Ces observations cliniques et investigatrices ont renforcé ma conviction que l'arthrite rhumatismale n'est pas nécessairement une affection implacablement chronique et progressive, vouée à n'être jamais maîtrisée par un procédé rapide et vraiment satisfaisant. Potentiellement, l'arthrite rhumatismale est même à présent rapidement réversible à n'importe quel stade de la maladie et elle finira bien par devenir thérapeutiquement réversible ou rapidement maîtrisable. Les puissantes forces correctrices sommeillant dans chaque individu atteint de cette maladie attendent le stimulant supérieur de l'avenir. Entretemps, celui-ci peut être déclenché d'une façon inconstante et apparemment inconséquence de manières différentes: spontanée, accidentelle, et thérapeutique.

La chrysothérapie produira une rémission frappante dans 10 à 15 pour cent des cas. En employant tout l'arsenal thérapeutique (or, physiothérapie, élimination des foyers d'infection et régime alimentaire) on n'obtient promptement de résultats frappants que dans environ 15 pour cent des cas.

Comparons la puissance, ou la relative impuissance, de ces remèdes, les meilleurs en notre possession, à celle inhérente à l'ictère ou à la grossesse, qui amène des rémissions articulaires considérables dans environ 60 à 90 pour cent des cas. Manifestement, il y existe un potentiel, non réalisé, susceptible de soulager l'arthrite rhumatismale; un potentiel qu'il nous faut faire ressortir. L'arthrite rhumatismale a son "talon d'Achille" contre lequel il nous faut diriger tous les nouveaux assauts. Exploitions les points faibles que nous venons de montrer avec un renouveau de zèle et d'optimisme.