

RIBONUCLEASE AND THIAMINE PYROPHOSPHATE IN THE TREATMENT OF RHEUMATOID ARTHRITIS

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INTRODUCTION

Rheumatoid arthritis is a deforming inflammatory arthropathy, more frequent in women after their thirtieth year. In the majority of cases, treatment is based on non-steroid or steroid anti-inflammatory medications, and not uncommonly the doses used result in side effects, especially gastric irritation. We have achieved excellent results using, in the place of these medications, ribonuclease and thiamine pyrophosphate in associated solution.

The aim of this publication is to present these results.

MATERIAL AND METHOD

Studies were performed of 31 patients, 27 women and 4 men. Their ages varied between 27 and 80, with an average of 48.

In all of them, the following parameters were appraised: arthralgias, inflammation and rigidity; these were classified subjectively as slight, moderate or severe. All patients were administered a combined course of treatment consisting of ribonuclease* and of thiamine pyrophosphate in solution* for six weeks. Anti-inflammatory medications which the patients had been receiving were suspended at the beginning of the treatment, or gradually in the case of steroids.

At the end of the six weeks the same observer once again determined the parameters in question. The response of each one was recorded according to the degree of severity, being described —also subjectively— as nil, regular, good or excellent.

TABLE I

ARTHRALGIAS

DEGREE		RESPONSE			
		Nil	Regular	Good	Excellent
Slight	0	—	—	—	—
Moderate	16(52%)	0	0	6(37%)	10(63%)
Severe	15(48%)	0	1(7%)	9(60%)	5(33%)
Total	31(100%)		1(4%)	15(48%)	15(48%)

TABLE II

INFLAMMATION

DEGREE		RESPONSE			
		Nil	Regular	Good	Excellent
Slight	6(20%)	0	0	1(17%)	5(83%)
Moderate	12(38%)	0	1(8%)	5(41%)	6(51%)
Severe	13(42%)	0	1(8%)	7(53%)	5(39%)
Total	31(100%)		2(6%)	13(42%)	16(52%)

TABLE III

RIGIDITY

DEGREE		RESPONSE			
		Nil	Regular	Good	Excellent
Slight	4(13%)	0	0	1(25%)	3(75%)
Moderate	11(35%)	0	1(9%)	3(27%)	7(64%)
Severe	16(52%)	0	0	12(75%)	4(25%)
Total	31(100%)		1(3%)	16(52%)	14(45%)

RESULTS

Tables I to III show the results for each sign or symptom studied. The number and percentage of patients is noted for each degree of severity, as well as the level of improvement achieved.

All patients exhibited improvements to different degrees, the best being those with the least severe instances of alterations. Nevertheless, even in those patients with a more severe picture, the response was described as excellent in 25%-39% of all cases.

DISCUSSION

Ribonuclease has been successfully used for the treatment of malignant neoplasias (1). However, unlike other enzymes such as streptokinase or streptodornase, it has not previously been used for inflammatory diseases. Our results show that a variety of modified ribonuclease* may be useful in the treatment of rheumatoid arthritis with a therapeutic response superior to that achieved with conventional anti-inflammatory drugs but without their side-effects.

At the same time of great assistance in this treatment was thiamine pyrophosphate in stable solution.* In other situations, this has proved to be an excellent

activator of the energy-releasing mechanisms in a variety of tissues (2), and even to be a direct energy-donor (3). It is possible that, for the illness in question, its most important effects are to promote tissular repair and to limit cicatrizal components.

The combination of both substances as an efficient substitute for conventional anti-inflammatory medications, without their corresponding side-effects, is suggested for the treatment of rheumatoid arthritis.

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