Rheumatol. Forum
2022, vol. 8, No. 4, 191–194

ISSN: 2720-3921, e-ISSN: 2720-3913

VIA MEDICA
www.journals.viamedica.pl

**Eugeniusz Józef Kucharz**

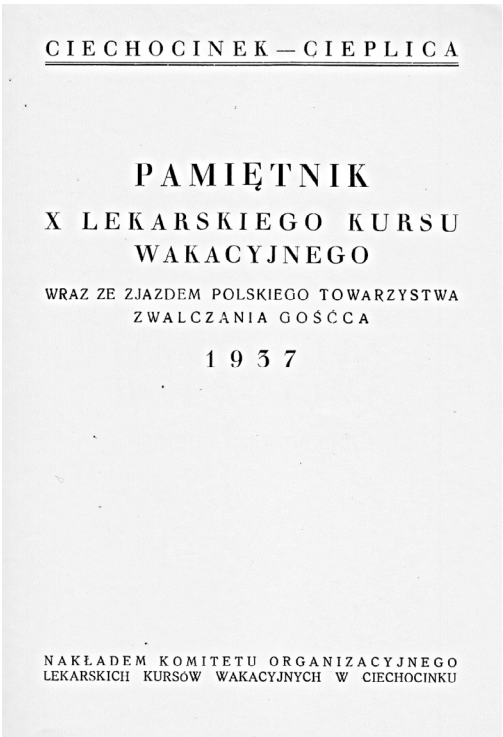
Department of Internal Medicine, Rheumatology and Clinical Immunology, Medical University of Silesia in Katowice

# History of rheumatology. Management of rheumatic disorders eighty-five year ago

The annual **Summer Medical Course** took place between 1928–1938 in Ciechocinek-Cieplica (Ciechocinek Spa). It was one of the most important postgraduate training events for Polish physicians. During three-days of the course, lectures were delivered by the most eminent Polish physicians of the inter-war period delivered lectures, and course was a significant and prestigious event for professional development. The lectures from individual courses appeared in print as separate volumes, for each course. Copies of these unique publications have been preserved in the National Library in Warsaw.

Recently, thanks to courtesy of the distinguished and well-known medical historian, Krzysztof Brożek, MD, PhD, I have received a copy of a book entitled **"Proceedings of the 10th Summer Medical Course together with the Congress of the Polish Society Against Rheumatism" (Pamiętnik X Lekarskiego Kursu Wakacyjnego wraz ze Zjazdem Polskiego Towarzystwa Zwalczania Gośćca)** [1]. The 406-page volume contains lectures delivered at the course and speeches delivered at the opening ceremony. The volume is in part an anniversary publication, and includes a detailed summary of the programme of all previous courses from 1928 to 1936, as well as, which may come as a surprise today, a list of all course participants with their full addresses. The 10th Summer Medical Course took place on 3–5 September 1937 in Ciechocinek-Cieplica (Fig. 1). Evaluation of the lecture topics for the first ten courses, it can be revealed that the issue of diagnosis and therapy of musculoskeletal diseases was widely represented, practically during every course. This indicates the high position of rheumatology in postgraduate medical education. It should also be noted that at the time, rheumatology had been considered as an independent medical speciality only for a few decades [2].

The last day of the 10th Summer Medical Course, there was a Congress of the Polish Society Against Rheumatism. During the Congress, Eleonora Reicher delivered the lecture on the treatment of rheumatic disorders. It is known from the programme that the lecture lasted 45 minutes. The eighty-five years have passed since the lecture was delivered, and access to the unique original publication became an op-

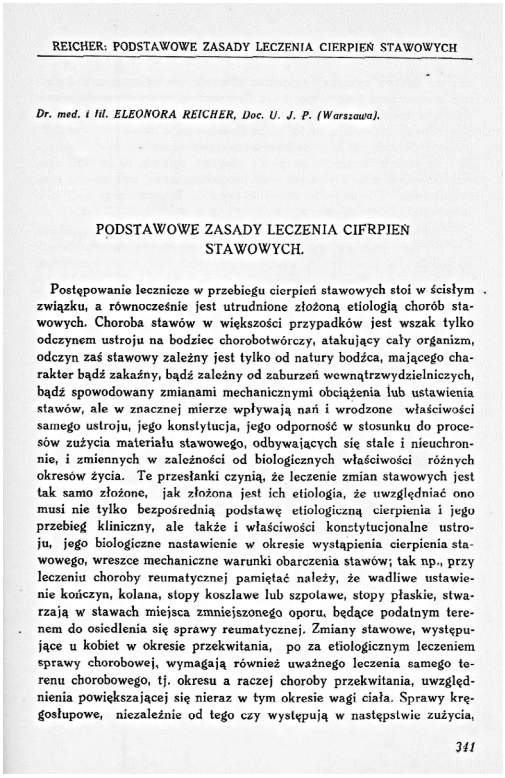

CIECHOCINEK — CIEPLICA

PAMIĘTNIK
X LEKARSKIEGO KURSU
WAKACYJNEGO
WRAZ ZE ZJAZDEM POLSKIEGO TOWARZYSTWA
ZWALCZANIA GOŚĆCA
1937

NAKŁADEM KOMITETU ORGANIZACYJNEGO
LEKARSKICH KURSÓW WAKACYJNYCH W CIECHOCINKU

**Figure 1.** Title page of the Proceedings od the 10th Summer Medical Course tohether with the Congress of the Polish Society Against Rheumatism in Ciechocinek-Cieplica in 1937 (from the collection of Eugeniusz J. Kucharz)

**Address for correspondence:**
Prof. Eugeniusz Józef Kucharz, MD, PhD
Department of Internal Medicine, Rheumatology and Clinical Immunology, Medical University of Silesia in Katowice
Ziołowa 45/47, 40–635 Katowice
e-mail: ejkucharz@poczta.onet.pl



REICHER: PODSTAWOWE ZASADY LECZENIA CIERPIEŃ STAWOWYCH

*Dr. med. i lil. ELEONORA REICHER, Doc. U. J. P. (Warszawa).*

PODSTAWOWE ZASADY LECZENIA CIFRPIEŃ STAWOWYCH.

Postępowanie lecznicze w przebiegu cierpień stawowych stoi w ścisłym związku, a równocześnie jest utrudnione złożoną etiologią chorób stawowych. Choroba stawów w większości przypadków jest wszak tylko odczynem ustroju na bodziec chorobotwórczy, atakujący cały organizm, odczyn zaś stawowy zależny jest tylko od natury bodźca, mającego charakter bądź zakaźny, bądź zależny od zaburzeń wewnątrzwydzielniczych, bądź spowodowany zmianami mechanicznymi obciążenia lub ustawienia stawów, ale w znacznej mierze wpływają nań i wrodzone właściwości samego ustroju, jego konstytucja, jego odporność w stosunku do procesów zużycia materiału stawowego, odbywających się stale i nieuchronnie, i zmiennych w zależności od biologicznych właściwości różnych okresów życia. Te przesłanki czynią, że leczenie zmian stawowych jest tak samo złożone, jak złożona jest ich etiologia, że uwzględniać ono musi nie tylko bezpośrednią podstawę etiologiczną cierpienia i jego przebieg kliniczny, ale także i właściwości konstytucjonalne ustroju, jego biologiczne nastawienie w okresie wystąpienia cierpienia stawowego, wreszce mechaniczne warunki obarczenia stawów; tak np., przy leczeniu choroby reumatycznej pamiętać należy, że wadliwe ustawienie kończyn, kolana, stopy koszlawe lub szpotawe, stopy płaskie, stwarzają w stawach miejsca zmniejszonego oporu, będące podatnym terenem do osiedlenia się sprawy reumatycznej. Zmiany stawowe, występujące u kobiet w okresie przekwitania, po za etiologicznym leczeniem sprawy chorobowej, wymagają również uważnego leczenia samego terenu chorobowego, tj. okresu a raczej choroby przekwitania, uwzględnienia powiększającej się nieraz w tym okresie wagi ciała. Sprawy kręgosłupowe, niezależnie od tego czy występują w następstwie zużycia,

341

**Figure 2.** First page of the lecture by Eleonora Reicher (from the collection of Eugeniusz J. Kucharz)

portunity to present the therapeutic strategies applied in rheumatology nearly a century ago.

The lecture was entitled **"Basic principles of treatment of the joint disorders"** (Fig. 2). Its content developed into comprehensive educational material, spanned 45 printed pages. The name of the author, Eleonora Reicher (1884–1973) who was an assistant professor at the Józef Piłsudski University of Warsaw at the time, is a guarantee of presenting the most important and then up-to-date information on the topics addressed in the title of the lecture [3–6].

The lecture is monographic and constitutes, in a way, "a small textbook". At the outset, the author points out the poor knowledge, or rather total ignorance, of the complex aetiology of rheumatic diseases. She stressed that articular changes were merely a reaction of the musculoskeletal system to general diseases, today we would call them systemic. This excerpt from the lecture is still relevant and reminds us that, despite undeniable advances in therapy and diagnosis, the causes of the development of most rheumatic diseases remain unknown. It is worth quoting what Eleonora Reicher writes on this subject in 1937: "Joint disease in most cases is merely a reaction of the system to a pathogenic stimulus affecting the whole organism, while the joint reaction depends only on the nature of the stimulus – which is either infectious or dependent on endocrine disruption, or caused by mechanical loads or joint alignment – but it is also largely influenced by the innate properties of the system itself, its constitution, its resilience to the wear and tear of the joint material, manifesting constantly and inevitably, and variables depending on the biological characteristics of different periods of life".

The introductory part of the lecture went on to discuss the main therapeutic approaches and methods. General recommendations included rest and lying in bed, prescribed in acute conditions. Other types of recommendations included the choice of a proper diet and the application of pharmacological methods. This included administration of sodium salicylate, aminophenazone known as pyramidon, aspirin that is acetylsalicylic acid, and phenazine or antipyrine. Further, the use of gold salts and colchicine was described. Another element of therapy was stimulus treatment consisting in injecting, most often, milk. This therapy also included the so-called autohemotherapy, i.e., intramuscular administration of the patient's own blood. However, these methods were recommended rather in chronic rheumatic diseases. One should not forget about the need to remove inflammatory foci (primarily in the tonsils) and application of the local treatment (heat, compresses, ointments with salicylate).

It should be recalled that Eleonora Reicher's lecture was given when antimicrobial treatment was unknown, with the exception of arsphenamine also known as salvarsan, discovered in 1909 by Paul Ehrlich (1854–1915) and Sahachiro Hata (1873–1938), a used to treat syphilis and African sleeping sickness. The antimicrobial effect of the first sulfonamide, protonsil was described in the experimental studies by Gerhard Domagk (1895–1964) revealed in 1935, and the drug was introduced into clinical practice a little later. Similarly, a few years later, the first antibiotic, penicillin was introduced into medical practice. The first glucocorticosteroid was used in therapy at the turn of the 1940s and 1950s [7].

Modern rheumatologists are surprised by the **very large doses of sodium salicylate** recommended in the lecture. Eleonora Reicher considered this drug to be the most important in the pharmacotherapy of rheumatic diseases. The recommended dose for adults was, on average, 10 g per day, with the possibility of increasing the dose to 15 g per day. Sodium salicylate was recommended to be administered with calcium bicarbonate in order to reduce gastric mucosal damage caused by

the drug. It was advisable to force diuresis by consuming more fluids. Such therapy should be continued for quite a long time and should not be abruptly discontinued. The description of the putative mechanism of action of sodium salicylate, suggested its inhibitory effect on antibody production and thereby impairment of the immune response. It is an effect that today we would call immunosuppressive. Currently, pathogenesis of almost all inflammatory rheumatic diseases is attributed to the disturbed immunity. The old description of the hypothetical therapeutical mechanism of salicylate in patients with rheumatic disorders in indirect way may indicate for autoimmunity as a causative pathomechanism of development of a number of rheumatic diseases.

Interestingly, Eleonora Reicher pays less attention to aspirin that is acetylsalicylic acid than to sodium salicylate. In this context, it should be remembered that aspirin was introduced into medicine as a substance better tolerated than salicylic acid. In 1897, Felix Hoffmann (1868–1946), working under the guidance of Arthur Eichengrün (1867–1949) at the Bayer Company, introduced acetylsalicylic acid as a medicine. There is a story in the historical sketches that Felix Hoffmann's father had been treated with salicylic acid which he had not tolerated. He had been suffering from the recurrent stomach haemorrhage, and had asked his son to develop a "less irritant" salicylate. Acetylsalicylic acid received a trade name Aspirin, and it is still one of the most widely used drugs today.

It is important to mention the other drugs recommended in the lecture, antipyretics and analgesics. These include aminophenazone known as pyramidon. It is a substance synthesized by Friedrich Stolz (1860–1936) and Ludwig Knorr (1859–1921) in 1893, and in 1897 introduced into clinical practice by Hoechst AG. Due to its toxicity, the drug is no longer used and was replaced by propyfenone known as pabialgin. Both drugs have now been superseded by paracetamol. Other medication mentioned by Eleonora Reicher, antipyrine is a phenazone, a substance with analgesic, antipyretic and anti-inflammatory effects, and analgesine, the substance with analgetic properties which currently is not used due its toxicity.

The main part of the lecture is an overview of therapeutic recommendations in specific diseases. This part of the lecture should be read bearing in mind the different classification and terminology of rheumatic diseases used in the 1930s.

In 1933 in Poland, thanks to the efforts of the Polish Society Against Rheumatism, a classification of rheumatic diseases was developed [2]. It identifies 8 groups of diseases. The first group is *polyarthritis infectiosa acuta* or acute arthritis caused by infectious agents. This group includes acute and subacute arthritis (*polyarthritis rheumatica acuta et subacuta*) i.e., rheumatic fever, and acute and subacute arthritis with direct infectious aetiology (*polyarthritis non rheumatica acuta et subacuta*) i.e., gonococcal, tuberculous, syphilitic, typhoid, diphtheria and other types of arthritis. The second group is *polyarthritis infectiosa chronica*. This group includes similar diseases as in group one, but with a chronic course.

The third group is *polyarthritius chronica primaria* or primary chronic arthritis. As can be assumed, this term applied to rheumatoid arthritis known under old term progressive chronic rheumatism.

The fourth group is polyarthritis caused by non-infectious agents (*polyarthritis non infectiosa*). This group included many diseases, such as post-traumatic arthritis, osteoarthritis, primary and secondary (*arthroso-arthritis metabolica, endocrinologica, et osteoarthritis*) as well as *spodylosis*. This group is relatively difficult to „translate" into modern terminology of rheumatic diseases. In this group, there are diseases with a clear mechanical or metabolic cause (gout), but also inflammatory spondyloarthropathies and diseases difficult to define today, such as *arhroso-arhritis climacterica*.

The last groups of rheumatic diseases in the 1933 classification are muscular rheumatism, neuralgias, diseases of tendons, fascias and bursae and diseases of other organs with articular manifestations.

This paper is not intended to discuss in detail the therapy recommended in the lecture for particular diseases. A few interesting passages have been highlighted only. The lecture discusses the differential diagnosis of acute rheumatism that is rheumatic fever and acute tuberculous arthritis.

Eleonora Reicher wrote about rheumatoid arthritis, i.e., primary chronic rheumatism that "it is one of the most severe, most persistent rheumatic disorder, and one of the most difficult tasks for a physician". In its treatment, she recommended the elimination of infectious foci, antipyretics and, above all, salicylates. She indicates the importance of management with calcium and vitamin D preparations. Pharmacological treatment was complemented

with the dietary and stimulus management. The latter included animal-derived currently unknown preparations, such as yatrencasein, yochinolcasein and others. These were mixtures of killed bacteria and preparations of proteins isolated from milk. Eleonora Reicher described the effects of gold salts, particularly solganal (aurothioglucose), and added caution against possible adverse reactions. She did not overlook balneological therapy including administration of bath with sulphur preparations.

Looking back at the treatment of rheumatic diseases from 85 years ago, we can see how many new drug groups of pharmacological agents have significantly increased the effectiveness of treatment and how much the prevalence of each disease has changed. This is particularly true of infectious diseases. Articular tuberculosis is extremely rare in clinical practice. One hardly remembers reactive arthritis in tuberculosis known as Poncet's disease. Syphilis and gonorrhoea are treated successfully with antimicrobial agents. For chronic non-infectious joint diseases, there is a group of disease-modifying antirheumatic drugs (DMARDs), far more effective than gold salts. Medication helps significantly reduce the development of structural damage within the musculoskeletal system. However, it must be remembered that out of 200–250 disease nosological units currently classified as rheumatic diseases, the aetiology is known only for infectious diseases and rare diseases caused by single genetic defects causing specific metabolic disorders. The aetiopathogenesis of the entire large group of chronic diseases that damage the joints is still unknown. Therefore, it can be said the progress of treatment has been achieved in a "roundabout way" without knowing the causes of the diseases, and the drugs applied "are not ones that act on the cause but well-targeted anti-inflammatory drugs".

When reading the classifications of rheumatic disorders from 1933, we do not find any of the diseases nowadays referred to as systemic connective tissue diseases, apart from rheumatoid arthritis. One might suspect that the last (VIII) group of diseases related to organ changes might have featured some cases of systemic lupus erythematosus, as the original classification refers to joint involvement in cases of serositis [8]. However, it should be remembered that it was only in 1942 that Paul Klemperer (1887–1964) and his colleagues proposed the term "collagen diseases", in 1983 replaced by the name connective tissue diseases [9]. It seems that, apart from rheumatoid arthritis, the other diseases in this group tended to be in the domain of internal medicine or dermatology, rather than rheumatology. The content of the lecture indicates that rheumatology paid much more attention to hormonal disorders related to musculoskeletal diseases than is the case today. Also missing from the described classification and treatment of rheumatic diseases are bone diseases.

Reminder and discussion of Eleonora Reicher's lecture is interesting because, on the one hand, it shows how much has changed in management of rheumatic diseases and medicine as a whole, and on the other hand, it teaches humility. It can be assumed that contemporary medical publications and textbooks, read in 2107, 85 years from now, will be perceived as something very different and far from the possibilities available to future physicians. One more reflection arises from reading the lectures of the Summer Medical Course. It is evident that in 1937 rheumatology was considered to be a significant and one of the leading medical specialties in Poland. Today, we often feel differently about the public perception of our specialty, even though, as then, musculoskeletal diseases are common and significant for the health of the population.

## References


1. Pamiętnik X Lekarskiego Kursu Wakacyjnego 1937 r. [Proceedings of the 10th Summer Medical Course] Nakładem Komitetu Organizacyjnego Lekarskich Kursów Wakacyjnych w Ciechocinku. Ciechocinek Cieplica, 1938.
2. Kucharz EJ. Beginning of the Polish rheumatology. In: Kucharz EJ. (ed.) Proceedings of the First Polish Congress on Investigation and Management of Rheumatism, Inowrocław 1930. Reprint of the original edition. Polish Society for Rheumatology, Katowice 2017: 17–163.
3. Szwej-Bar B, Kucharz EJ. Życie i działalność profesor Eleonory Reicher (1884–1973) [Life and achievements of Eleonora Reicher 1884-1973]. Ann Acad Med Siles. 1996; 31: 237–243.
4. Sadowska-Wróblewska M. Prof. dr med. Eleonora Reicher [Obituary]. Reumatologia. 1973; 11: 201–203.
5. Maślińska M. She started everything: tribute to Professor Eleonora Reicher on the 60th anniversary of the Institute of Rheumatology. Reumatologia. 2011; 49: 315–320.
6. Kucharz EJ. Eleonora Reicher: a pioneer of European rheumatology. Ann Rheum Dis. 2022; 81(7): 922–924, doi: 10.1136/annrheumdis-2022-222567, indexed in Pubmed: 35477519.
7. Kucharz EJ. Zmieniające się oblicza reumatologii [Changing aspects of rheumatology]. In: Zimmermann-Górska I. (ed.) Reumatolodzy. Opowieści w kuluarach. Medisfera, Otwock 2014: 101–132.
8. Kucharz EJ. Toczeń rumieniowaty układowy – historia choroby [Systemic lupus erythematosus, a history of the disease]. In: Majdan M. (ed.) Toczeń rumieniowaty układowy. Termedia, Poznań 2015: 9–22.
9. Kucharz EJ. Przemożna siła przyzwyczajenia [Overwhelming force of the custom]. Pro Medico. 2013; 201: 24.