HISTORY AND HUMANITIES IN DERMATOLOGY

Professor Joaquín Piñol Aguadé: An Important Figure in Dermatology

La figura del Profesor Joaquín Piñol Aguadé

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Received 21 April 2017; accepted 21 April 2017
Available online 13 September 2017

On the occasion of the 100th anniversary of Professor Joaquín Piñol Aguadé's birth, we take great satisfaction in recalling his first contribution to a meeting of the Catalan section of the Spanish Academy of Dermatology and Syphilology on January 27, 1944. He described a patient with erythema multiforme associated with rectal lymphogranulomatosis that was successfully treated with sulfonamides. The case offered a context for a broad discussion of the nature of erythema multiforme, and the paper was subsequently published in volume 35 of Actas Dermo-Sifiliográficas. Professor Piñol was faithful to the association throughout his career, and this first article was followed by nearly a hundred more in our journal.

Joaquín Piñol Aguadé (1917–1977) (Fig. 1) received his medical degree in 1942 and was appointed Associate Professor of Dermatology at the University of Barcelona in 1960. In 1967 he became a full professor, continuing in that position until his premature death at the age of 59 years. His life has been extensively documented and is therefore not the focus of this article, which will instead summarize his contributions to medical knowledge in his time.

Professor Piñol was untiringly studious. His memory was formidable and he poured himself into his work. Headstrong, he could be obsessive when there was a problem to solve, and he was always generous with his time. These character traits influenced his academic interests and marked his scientific output. Never losing sight of the close relationship
between the skin and all it covered, he stressed the importance of the cutaneous signs of internal diseases. One great interest was the simplification of skin disease classifications, which were still grouped in complex ways and described through varying terminology until the middle years of the 20th century. He emphasized the key features of each disease and downplayed the role of secondary signs that might mask the true diagnosis. Treatments, the side effects of medications, and finding new diagnostic approaches were key issues for him. His careful observation of cases allowed him to discern diseases that had not yet been described and for whose discovery he was internationally recognized. His wide-ranging knowledge was reflected in numerous articles, his PhD thesis, monographs, and book chapters. An exhaustive description of all his contributions would be too lengthy for this paper, which seeks only to offer a brief summary of his work organized according to areas of knowledge.

Blistering Diseases

Professor Piñol felt that various blistering diseases were being grouped under the term pemphigus in the 1950s. Many writers, he said, included "an extraordinary number of unwarranted subdivisions," and he warned that it was wrong to "place too much value on the minute description of the morphology of rashes." Diagnosis should be based on the findings of pathology, he asserted, stressing the importance of Tzanck's cytology in diagnosis. He also argued for the recognition of Senear-Usher syndrome as a separate diagnosis within the pemphigus spectrum, a concept not fully accepted at the time.

Genodermatoses

Genodermatoses were among the conditions Professor Piñol studied, and he published over 20 case reports and extensive review articles in this area. An important publication dealt with a family whose members had dyskeratotic tumors under the nail, a condition that might have been an unusual expression of the verrucous phase of incontinentia pigmenti.

Rheumatism, Panniculitis, and Systemic Diseases

With the rheumatologists Jaume Rotés and Pere Barceló, Professor Piñol reviewed 20 cases of psoriasis with joint involvement, providing a careful, detailed description of arthropathy associated with this skin disease. Later, he and Professor Xavier Vilanova analyzed 54 cases and 150 case histories of psoriatic arthritis as a specific diagnostic entity. It was published in the British Journal Rheumatism in 1951.

Professor Piñol was also very interested in the difficult-to-diagnose inflammations of adipose tissue, the subject of his 1963 PhD thesis, which included a strong critique of the number of distinct diagnoses current at the time. This thesis established bases for identifying clearly distinguishable forms of panniculitis as follows: 1) fat necrosis of the newborn, 2) infective panniculitis, 3) panniculitis in proximity with other conditions, 4) panniculitis forming part of other well defined syndromes (eg, sarcoidosis or lupus erythematosus), 5) nodular vasculitis and indurated erythema, 6) Weber-Christian syndrome, 7) erythema nodosum, 7) Rothmann-Makai panniculitis, and 8) subacute nodular migratory hypodermitis. He reserved the term indeterminate panniculitis for forms that were difficult to identify. The first description of subacute nodular migratory panniculitis had appeared in a 1956 publication authored with Professor Vilanova.

The list of publications on systemic diseases with cutaneous manifestations is extensive and far-ranging, an example of Professor Piñol's interest in recognizing the skin signs that would facilitate the early diagnosis of potentially serious multiorgan diseases. By writing about such cases "from the vantage of dermatology," he attempted "to arouse interest among internists in the study and diagnosis of these [cutaneous] conditions, which they see and are asked to diagnose much more often than we are." In 1977 he published a report of 4 cases with a peculiar clinical picture. The title (here translated) of the article was "Focal Epidermal Necrosis: A Variant of Lupus Erythematosus or a New Disease?" This paper predated by several years J. N. Gilliam and R. D. Sontheimer's English-language description of subacute cutaneous lupus erythematosus as a distinctive entity.

Lymphomas

The years 1953, 1955, and 1964 saw the publication of case reports signed by Vilanova and Piñol. The patients described had developed subcutaneous nodular lesions that progressed to necrosis, and the prognosis was very poor. In these reports the coauthors discussed whether they were seeing systemic panniculitis resulting in death, extrafacial Wegener syndrome, or true cases of malignant reticulosis affecting subcutaneous tissue. They later observed evident anaplastic cells as well as erythrophagia in the infiltrate of subcutaneous nodules in a new case that appeared in 1972, at which point they called the clinical picture necrotic reticulosis. Autopsy information available for this and yet another case allowed them to link this disease to histiocytic medullary reticulosis, which had been described in English in 1939 by Scott and Robb-Smith, who Piñol and Vilanova named in their 1974 title. The disease remained selectively subcutaneous, however, until its final stages.

The diagnostic problem they described was found again and again in cases of infiltrative, necrotic lesions of the nose and central portion of the face because granulomatous infiltration and necrosis had masked the true origin of the process in lymphoma.

This line of study raised the problem of the malignant nature of disease processes that were difficult to categorize in their early stages, and it also warned of the risk of attributing malignancy to processes that were entirely benign, such as acute varioliform parapsoriasis or lymphomatoid papulosis.

Shortly before his death, Professor Piñol published a monograph on cutaneous lymphomas in which he brought to bear the full depth of his understanding of the subject. He proposed a classification system based on cytologic, cytochemical, and ultrastructural features that he adapted to the general classifications current at that time.
Skin Allergies, Contact Eczema, and Photobiology

Studies proposed by Professor Piñol were able to identify allergens in optical whiteners found in detergents, in nylon used for the pockets of trousers, and in polyurethane used in shoes. These substances were causing genuine epidermides of contact dermatitis at the time, and he was able to work with the industry to prevent new cases of sensitizations.

That certain chemicals cause skin lesions when exposed to light was made clear in Professor Piñol’s 1972 monograph on photobiology, where he referred to such concepts as phototoxic dermatitis and photoallergic reactions and through which the terms dermatitis luminica, fototoxia, and fotodermatia were to become fully absorbed into our practice of dermatology in Spain.

Cytology

In order to increase the number of diagnostic tests available, Professor Piñol focused his efforts on the study of tumor morphology and cytology to complement histologic diagnosis. That research led to a paper on the cytologic features of basal cell carcinomas, published in the Journal of Investigative Dermatology in 1962.

Porphyria

Professor Piñol started working on one of his preferred areas of research, porphyria, with his first case report on the disease in 1950. A 1969 description of a biochemically unclassifiable case became one of his most important contributions on the topic. He was later able to use more advanced diagnostic techniques to identify the composition of urinary and blood porphyrins, as described in a 1975 report. He used the term hepatoerythrocytotic porphyria to describe the form identified, and his name remains associated with it in the international literature. Years later, enzyme assays and genetic testing were able to demonstrate that this form is a homozygous hereditary porphyria cutanea tarda.

Conclusions

Professor Piñol’s work established the ground for later research undertaken by his followers. In a speech, read for him on the occasion of his posthumous investiture into the Royal Academy of Medicine of Barcelona, he wrote, “I will not contemplate the splendid branches of trees I have planted, nor even see germinate and sprout seeds I have placed in the ground.” Forty years after his death, we can say that the seeds Professor Piñol sowed have indeed germinated and grown proud thanks to his example and guidance.

Conflicts of Interest

The author declares that she has no conflicts of interest.

Acknowledgments

To the Resource Center for Learning and Research (CRAI) libraries of the University of Barcelona (campus of the Hospital Clínico de Barcelona and the Cervera Depository) for allowing access to all their material concerning Professor Joaquín Piñol Aguadé.

To the College of Physicians of Barcelona for organizing the commemoration of Dr. Piñol i Aguadé’s life and work (“2017: Year of Joaquín Piñol i Aguadé”).

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