



Diagnostic framing problems in a case of joint pain associated with urticarial lesions



Brînzei Maria¹, Udrea Mihaela Ruxandra¹, Ali Selda^{1,2}, Bumbăcea Roxana Silvia^{1,2}


1. Spitalul Clinic de Nefrologie 'Dr. Carol Davila' București; 2. Universitatea de Medicină și Farmacie 'Carol Davila' București

INTRODUCTION

Urticaria is a condition characterized by the development of wheals (hives), angioedema or both and is thought to afflict up to 20% of population at some point in time. Urticaria needs to be differentiated from other medical conditions where wheals, angioedema or both can occur, for example anaphylaxis, auto-inflammatory syndromes, urticarial vasculitis or bradykinin-mediated angioedema including hereditary angioedema. Comorbidities such as fatigue, depression, autoimmune diseases are well known in patients with spontaneous chronic urticaria. Occasionally patients may experience pain or joint edema that occurs especially when the urticarial papules are located on the palms or soles.

CASE REPORT

History:

- 55 years old 
 - pruritic erythematous-papular eruptions
 - periarticular edema
 - fleeting arthralgia at peripheral joints (hands, feet, elbows and knees)
 - NSAID treatments relieved only joint symptoms
- for 12 years

Clinical examination:

- erythematous-edematous plaque superimposed over the metacarpal joints and over the elbow.
- Atopy signs: palmar hyperlinearity, accentuated skin xerosis, white dermographism.



Work up:

Investigations	Results
Hemogram	Normal
Coagulogram	Normal
Standard chemistry	Normal
Immunological profile for autoimmune diseases	Negative
Pharyngeal and nasal exudate	Normal
Thyroid functions	Normal
Viral factors (HVC and HBs)	Negative
Hands X-ray	Normal

Analysis	Result	References	Interpretation
Rheumatoid factor	11.9 IU/mL	0-14 IU/mL	Negative
ANA antibodies	8.60	<20 negativ,	Negative
Anti ds-DNA antibodies	0.97 IU/mL	0-18 IU/mL	Negative
Anti cardiolipine antibodies (IgG)	1.90 GPL/mL	0-12 GPL/mL	Negative
Anti cardiolipine antibodies (IgM)	2.60 MPL/mL	0-12 MPL/mL	Negative
Anti Ro SS-a antibodies	0.67 IU/ml	0-12 IU/mL	Negative
Anti La SS-b antibodies	1.26 IU/mL	0-12 IU/mL	Negative
Anti SM antibodies	0.51 IU/mL	0-12 IU/mL	Negative

HCA: rheumatoid arthritis

Treatment:

Rupatadine 40 mg/day: edema and arthralgia at the level of the proximal phalanx of the right thumb and right elbow



Dexamethasone 8 mg/ml IV : the remission of cutaneous and articular symptoms



Ketotifen 1 mg / day and Montelukast 10 mg/day are administered, along with 30 mg/day Rupatadine: all the symptoms improved

CONCLUSION

In cases of arthralgia accompanied with urticaria but with negative imagistic and serological investigations, rheumatological diagnoses are very unlikely. In this context the particularity of the joint pain occurs through periarticular angioedema in urticarial exacerbations. Patients of this type will respond to maximum doses of H1 antihistamines and / or omalizumab.

REFERENCES

1. Articular angioedema in patients with chronic spontaneous urticaria is frequently misdiagnosed as arthritis E. Toubi, A. M. Giménez-Arnu, M. Maurer, Z. a Vadasz, The Journal of Allergy and Clinical Immunology: In Practice, 2020
2. The EAACI/GA²LEN/EDF/WAO guideline for the definition, classification, diagnosis and management of urticaria, Zuberbier T, Aberer W, Asero R, et al., Allergy, 2018
3. Middleton's Allergy: Principles and Practice 9th edition, A. Burks, S. Holgate, R. O'Hehir, L. Bacharier, D.H. Broide, G. Khurana Hershey, Stokes Peebles, 2020