

Importance of patients' photographs for urticaria diagnosis

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Clinical Implications

- We showed a high frequency (63%) and relevance of pictures brought by dermatology patients during urticaria consultation.

TO THE EDITOR:

More and more often, patients bring pictures of their skin lesions for their dermatology visit. The aim of this study was to evaluate the frequency with which patients consulting in urticaria-specialized centers for urticaria bring photographs and the value of such photographs for the diagnosis.

From May 1 to July 31, 2017, we collected prospectively data from patients who consulted for urticaria in 17 departments of dermatology members of the Urticaria Group of French Society of Dermatology (GUS), through a standardized survey. Data collected included clinical characteristics (age, gender, clinical manifestations, and type of urticaria), presence or absence of cutaneous lesions at the time of the visit, quality of the pictures, and reasons for taking them.

The study of the association between qualitative variables was performed by independence tests. Note that as χ^2 values tend to increase with the number of modalities, Cramer's V has been retained to overcome the size effect of the tables.

No data allowing the identification of the patients were collected, and all patients gave oral informed consent to participate in accordance with the French legislation.

We included consecutively 311 patients (215 female, 96 male), with a median age of 41 years, consulting for wheals and/or angioedema that were acute in 57 cases and chronic in 254 cases. At the time of the visit, 100 patients (32%) had skin lesions whereas 211 (68%) had none. Among 197 patients who brought pictures, 134 had no cutaneous lesions at the time of the consultation. Pictures confirmed diagnosis of urticaria for 125 patients and invalidated it for the remaining 9 patients. There was no significant difference between patients who brought photographs and those who did not in terms of sex, age, type of urticaria, and whether it was an acute or chronic urticaria (Table I).

The 2 main reasons for doing so were the fear of not having any lesions to show at the time of the consultation (113 patients) and a flare more important than usually (93 patients). The more frequent proposals on the open item were "recommendation of the physician" and "to show the physician."

The quality of the pictures was considered good, average, and poor by physicians for 133, 54, and 10 cases, respectively.

Photographies are of particular interest in dermatology as the delay to obtain a consultation is long and the symptoms are

sometimes transient. Thanks to the great development and enhancements of smartphones, patients often bring pictures during consultation and the use of teledermatology will probably increase in the near future.

Very few studies until now have investigated the relevance of information provided by pictures brought by patients during a dermatology visit. Tollefson and Frieden¹ emphasize the importance of pictures taken by parents during the first weeks of life and brought at the consultation to evaluate the evolution of infantile hemangiomas. In Hubiche's study, among 162 children the photographs of whom the parents brought, physicians considered that photographs provided additional information for 124 patients (76.5%). Furthermore, for 141 patients (87%), the visible lesions during the appointment had changed compared with the photographs.² No study reported the frequency with which patients bring photographs during dermatological visit and in case of urticaria skin lesions.

As already reported in some medical teleconsultations, the contribution of sending photographs permitted a medical diagnosis.³ But very few studies reported in teledermatology. A study reported interest of teledermatology as a useful alternative for patients with poor access to specialty care in diagnosing skin cancer.⁴

O'Connor et al⁵ showed overall concordance of 83% between photograph-based versus in-person diagnosis, in a randomized clinical trial. Furthermore, the quality of the photographs was high using smartphone cameras,⁵ and this is in accordance with our results as in 133 cases of 197 the pictures provided were of good quality.

In our study, patients were referred mostly by dermatologists or general practitioners, and most of the centers were general or

TABLE I. Clinical characteristics of the 311 patients

	Total n = 311	Photographs n = 197 (63)	No photographs n = 114 (37)	P value
Median age (y)	41.17	40.66	41.69	ns
Sex				.556
Female	215 (69)	139	76	
Male	96 (31)	58	38	
Clinical manifestations of urticaria				.588
Wheals	181 (58)	112	69	
Wheals + AO	111 (36)	71	40	
AO	19 (6)	14	5	
Type of urticaria				.631
Acute urticarial	57 (18)	32	25	
Chronic urticaria	254 (82)	165	89	
Presence of skin lesions at the time of visit				.1
Yes	100 (32)	63	37	
No	211 (68)	134	77	

Patient number (%); ns: no significant difference between the 2 groups in terms of ages (calculating with a correlation report = 6.62×10^{-4} , corresponding to the report between the age variables in the 2 groups).

AO, Angioedema.

university hospitals that could explain this high percentage of pictures. Fourteen of the 19 patients (74%) with angioedema brought pictures compared with patients with wheals and wheals and angioedema in respectively 112 of 181 (62%) and 71 of 111 (64%) of the cases (Table I). The high frequency may be specific to visits of patients with urticaria probably due to the fleeting nature of the skin lesions and to the presence of associated angioedema that worries patients.

This study confirms the high frequency (63%) and relevance of pictures brought by dermatology patients during urticaria consultation. To evaluate the value of photographs for confirming and/or excluding the diagnosis of urticaria, a study including referrals from nonexpert physicians should be performed.

Taking photographs is of particular importance as the delays of appointments are often long; skin lesions may be modified by scratching or treatments or even may have disappeared at the time of the consultation, as it is often the case with urticaria.

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