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1 **Importance of patients' photographs for urticaria diagnosis**

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22 All authors participated in the writing of this manuscript. EA: clinical management, wrote the
23 manuscript, proofreading of the manuscript; AS: clinical management, wrote the manuscript,
24 proofreading of the manuscript; MSD: conception of the study, wrote the manuscript, and
25 proofreading of the manuscript.

26 *: EA and AS contributed equally.

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31 **Clinical Implications box**

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

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35 **To the Editor**

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

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

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

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

49 We included consecutively 311 patients (215 female, 96 male), with a median age of 41 years
50 old, consulting for wheals and/or angioedema which were acute in 57 cases and chronic in 254
51 cases. At the time of the visit, 100 patients (32%) had skin lesions whereas 211 (68%) had none.
52 Among 197 patients who brought pictures, 134 had no cutaneous lesions at the time of the
53 consultation. Pictures confirmed diagnosis of urticaria for 125 patients and invalidated it for the
54 remaining 9 ones. There was no significant difference between patients who brought photos
55 and those who did not in terms of sex, age, type of urticaria and whether it was an acute or
56 chronic urticaria (Table 1).

57 The two main reasons for doing so were the fear of not having any lesions to show at the time
58 of the consultation (113 patients) and a flare more important than usually (93 patients). The

59 more frequent proposals on the open item were: “recommendation of the physician” and “to
60 show the physician”.

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

63 Photographies are of particular interest in dermatology as the delay to obtain a consultation is
64 long and the symptoms are sometimes transient. Thanks to the great development and
65 enhancements of smartphones patients often bring pictures during consultation and the use of
66 Tele dermatology will probably increase in the near future.

67 Very few studies until now have investigated the relevance of information provided by pictures
68 brought by patients during a dermatology visit. Toffelson *et al.* emphasize the importance of
69 pictures taken by parents during the first weeks of life and brought at the consultation to
70 evaluate the evolution of infantile hemangiomas (1). In Hubiche’s study, among 162 children
71 for which the parents brought pictures, physicians considered that photographs provided
72 additional information for 124 patients (76,5%). Furthermore for 141 patients (87%), the visible
73 lesions during the appointment had changed compared to the photographs (2). No study
74 reported the frequency with which patients bring photos during dermatological visit and in case
75 of urticaria skin lesions.

76 As already reported in some medical tele-consultations, the contribution of sending
77 photographs permitted a medical diagnosis (3). But very few studies reported in
78 Tele dermatology. A study reported interest of Tele dermatology as a useful alternative for
79 patients with poor access to specialty care in diagnosing skin cancer (4).

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

84 In our study, patients were referred mostly by dermatologists or general practitioner, and most
85 of the centers are general or university hospital which could explain this high percentage of
86 picture. Fourteen of the 19 patients (74%) with angioedema brought pictures compared to
87 patients with wheals and wheals and angioedema in respectively 112/181 (62%) and 71/111
88 (64%) of the cases (Table 1). The high frequency may be specific to visits of patients with

89 urticaria probably due to the fleeting nature of the skin lesions and to the presence of associated
90 angioedema that worries patients.

91 This study confirms the high frequency (63%) and relevance of pictures brought by
92 dermatology patients during urticaria consultation. In order to evaluate the value of photos for
93 confirming/excluding the diagnosis of urticaria, a study including referrals from non expert
94 physicians should be performed.

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

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100 **References**

- 101 1. Tollefson MM, Frieden IJ. Early growth of infantile hemangiomas: what parents’
102 photographs tell us. *Pediatrics* 2012;130:e314-320.
- 103 2. Hubiche T, Valério L, Boralevi F, Mahe E, Bodemer Skandalis C, Phan A et al. Visualization
104 of Patients’ Skin Lesions on Their Smartphones: A New Step During Dermatology Visits.
105 *JAMA Dermatol* 2016;152:95–97.3.
- 106 3. Dehours E, Saccavini A, Roucolle P, Roux P, Bounes V. Added value of sending photograph
107 in diagnosing a medical disease declared at sea: experience of the French Tele-Medical
108 Assistance Service. *Int Marit Health*. 2017;68:122-125.
- 109 4. Walocko FM, Tejasvi T. Teledermatology Applications in Skin Cancer Diagnosis. *Dermatol*
110 *Clin*. 2017 ;35:559-563.
- 111 5. O’Connor DM, Jew OS, Perman MJ, Castelo-Soccio LA, Winston FK, McMahon PJ.
112 Diagnostic Accuracy of Pediatric Teledermatology Using Parent-Submitted Photographs: A
113 Randomized Clinical Trial. *JAMA Dermatol*. 2017, 153:1243-1248.

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120 **Table 1:** Clinical characteristics of the 311 patients

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	Total n=311	Photos n=197 (63)	No photos n=114 (37)	P value
Median age (years)	41.17	40.66	41.69	ns*
Sex				0.556
<i>Female</i>	215 (69)	139	76	
<i>Male</i>	96 (31)	58	38	
Clinical manifestations of urticaria				0.588
<i>Wheals</i>	181 (58)	112	69	
<i>Wheals + AO</i>	111 (36)	71	40	
<i>AO</i>	19 (6)	14	5	
Type of urticaria				0.631
<i>Acute urticarial</i>	57 (18)	32	25	
<i>Chronic urticaria</i>	254 (82)	165	89	
Presence of skin lesions at the time of visit				0.1
<i>Yes</i>	100 (32)	63	37	
<i>No</i>	211 (68)	134	77	

122

123 Legends: AO: angioedema, patient number (%), ns*: No significant difference between the 2 groups
 124 in term of ages (calculating with a correlation report = 6.62×10^{-4} , corresponding to the report
 125 between the age variable in the 2 groups)

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