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## INTRODUCTION

Treatment modalities for hidradenitis suppurativa (HS) include antibiotics, surgery, biologics, retinoids.... Use of retinoids is based on open case-series. International guidelines of HS management differ concerning the type of retinoids and the HS's phenotype in which they are recommended. We sought to describe the practice regarding retinoids prescriptions for HS in France.

## MATERIAL AND METHODS

We performed a practice survey in the French physician's network "ResoVerneuil" (278 members including dermatologists, surgeons, gastroenterologists involved in the treatment of HS) to identify the strategy of use of retinoids in daily life for the treatment of HS. An online questionnaire was sent to all members between 11<sup>th</sup> February and 23<sup>rd</sup> March 2022. Physicians were asked whether they use retinoids for HS and when appropriate which retinoid, for which profile of patients (follicular or classical HS, Hurley stage, gender), and modalities of prescription. Reasons for not prescribing retinoid of HS were analyzed.

## RESULTS

107 physicians answered the survey: 104 dermatologists, 2 surgeons and 1 proctologist. 35.5% were hospital based, 35.5% had a private practice and 29% a mixed practice; 24.3% had a dedicated consultation for HS. 61 physicians reported to see less than 5 patients with HS per month, 31 5 to 15 patients and 15 more than 15 patients. 41 declared not to prescribe retinoids for HS due to lack of eligible patient (29.3%), lack of experience (39%), or lack of evidence in HS (61%). Among the 66 physicians prescribing retinoids, 61 used them for follicular phenotype of HS and 12 for classical HS. They were used after failure of antibiotics (n=57) or as first line treatment (n=15); as monotherapy (n= 27), in combination with antibiotic for flares (n=42), with background antibiotics (n=14), with zinc (n=7), with surgery (n=20) or with biologics (n=9). 49 physicians declared to prescribe isotretinoin, 39 acitretin and 9 alitretinoin. The table detail the modalities of use of the different retinoids. One third of physicians declared that French recommendations for HS treatment published in 2019 led to a modification of their retinoid use.

	Isotretinoin (n=49)	Alitretinoin (n=9)	Acitretin (n=39)
<b>Prescription in</b>			
<b>Men</b>	49 (100%)	7 (77.8%)	39 (100%)
<b>Women of childbearing age</b>	30 (61.2%)	7 (77.8%)	3 (7.7%)
<b>Post menopausal women</b>	29 (59.2%)	6 (66.7%)	28 (71.8%)
<b>Dosage</b>	<0.5mg/kg/d : 18 (36.7%) 0.5 to 1 mg/kg/d : 31 (63.3%)	10 mg : 1 (11.1%) 30 mg : 8 (88.9%)	<0.3 mg/kg/d : 9 (23.1%) 0.3 to 0.8 mg/kg/d : 29 (74.4%) > 0.8mg/kg/d : 1 (2.6%)
<b>Prescription in HS</b>			
<b>Hurley 1</b>	35 (71.4%)	5 (55.6%)	26 (66.7%)
<b>Hurley 2</b>	37 (75.5%)	8 (88.9%)	35 (89.7%)
<b>Hurley 3</b>	5 (10.2%)	3 (33.3%)	8 (20.5%)
<b>Length of prescription</b>			
<b>3. to 6 months</b>	20 (40.8%)	4 (44.4%)	7 (17.9%)
<b>&gt;6 months</b>	29 (59.2%)	5 (55.6%)	32 (82%)

## CONCLUSION:

More than 60% of physicians prescribed retinoids for HS, mostly for follicular phenotype. Isotretinoin and acitretin were preferred to alitretinoin, although the French recommendations consider the three molecules with the same level of evidence for follicular HS after failure of antibiotics. Retinoids were used in combination with other therapeutic modalities, even if data of their use in combination are scarce. Acitretin was rarely used in women of childbearing age due to its prolonged teratogenic potential, isotretinoin and alitretinoin were preferred in this situation. Isotretinoin and alitretinoin were used as short-term treatment by around 40% of the physicians, contrary to acitretin, that was preferentially used as long-term treatment. About 40% of physicians do not use retinoids in HS, mainly because considering them non-efficient in this indication.

This study underlines the heterogeneity of use of retinoids in HS. Studies with better level of evidence are needed to clarify their place in HS therapeutic strategy.

### References:

Alkhan A, Sayed C, Alavi A, Alhusayn R, Brassard A, Burkhardt C, Crowell K, Esani DB, Gottlieb AB, Hamzavi I, Hazan PG, Jaleel T, Kimball AB, Kirby J, Lowes MA, Micheletti R, Miller A, Naik HS, Orgill D, Poulin Y. North American clinical management guidelines for hidradenitis suppurativa: A publication from the United States and Canadian Hidradenitis Suppurativa Foundations. Part II: Topical, intralésional, and systemic medical management. *J Am Acad Dermatol.* 2019 Jul;81(1):91-101.  
 Ingram JR, Collier F, Brown D, Burton T, Burton J, Chin MF, Desai N, Goodwin TEL, Piguet V, Park AG, Exton LS, Mohd Mustaffa MF. British Association of Dermatologists guidelines for the management of hidradenitis suppurativa (acne inversa) 2018. *Br J Dermatol.* 2019 May;180(5):1009-1017.  
 Hunger RE, Lafitte E, Lüscher S, Manetti C, Mühlstedt M, Schiller P, Lippman AK, Moschberger P, Navarini AA. Swiss Practice Recommendations for the Management of Hidradenitis Suppurativa/Acne Inversa. *Dermatology.* 2017;233(3):113-119.  
 Zouboulis CC, Bechara FG, Dickinson-Blok R, Guillouf N, Honari B, Hughes R, Kimball AB, Kirby B, Martorell A, Pardo M, Prens EP, Ring HC, Tziellos T, van der Zee HH, van Stralen KJ, Vossen ARJ, Jemec GBE. Hidradenitis suppurativa/acne inversa: a practical framework for treatment optimization - systematic review and recommendations from the HS ALLIANCE working group. *J Eur Acad Dermatol Venereol.* 2019 Jan;33(1):19-31.  
 Megoshiki RP, Rathi-Machado MC, Duarte DV, Sato R, Nunes SH, Chaves M, Hietz SH, Ramos AMC. Consensus on the treatment of hidradenitis suppurativa. *Brazilian Society of Dermatology. An Bras Dermatol.* 2019 Apr;94(Suppl 1):7-19.  
 Bertolotti A, Sidiadi E, Jón-Lambert O, Bourgauf-Villada J, Moyal-Barracco M, Perrot P, Jouan N, Yordanov Y, Sidorowicz S, Chazelas K, Bru-Dapets MF, Caumes E, Sei JF. HS working group, Chasidow O, Baylot-Barry M, Centre of Evidence of the French Society of Dermatology. Guidelines for the management of hidradenitis suppurativa: recommendations supported by the Centre of Evidence of the French Society of Dermatology. *Br J Dermatol.* 2023 May;184(5):963-966.  
 Zouboulis CC, Desai N, Emestam L, Hunger RE, Ioannides O, Juhász I, Lapins J, Matuziak L, Prens EP, Revuz J, Schneider-Burusa S, Szepietowski JC, van der Zee HH, Jemec GB. European S1 guideline for the treatment of hidradenitis suppurativa/acne inversa. *J Eur Acad Dermatol Venereol.* 2015 Apr;29(4):619-44.

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