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https://doi.org/10.1016/j.jaad.2018.11.048

Rhinophyma is associated with alcohol intake

To The Editor: Rhinophyma has been considered a sign of excessive drinking since antiquity despite a lack of quality data. We therefore conducted a case-control study at Strasbourg Hospital, with private practice dermatologists, to evaluate this association.

We included 52 cases of prevalent rhinophyma between December 2015 and July 2017 and compared each with 3 age- and sex-matched dermatologic controls without facial dermatoses (N = 156) by using standardized questionnaires to evaluate alcohol intake (units/wk), severity of rhinophyma on the National Rosacea Society scale (0-3), and other factors (Table I). Statistical analyses were conducted by using a mixed-effects logistic regression model.

The male-to-female sex ratio was 25:1, and the median age was 69 years (range, 47-91). Rhinophyma was associated with erythema and telangiectasia (94.2%), papulopustules (46.2%), and other types of phymas (19.2%). The median alcohol intake was 14 units/wk [range, 3-24] in cases versus 3 units/wk [range, 0-8.5] in controls. Alcohol intake was low (0-7 units/wk) in 40.4% of cases, moderate (8-21 units/wk) in 32.7%, and excessive (>21 units/wk) in 26.9%. The risk of rhinophyma was high for moderate drinkers (odds ratio [OR], 4.14; 95% confidence interval [CI], 1.41-12.15; $P = .010$) and higher in excessive drinkers (OR, 17.33; 95% CI, 3.96-75.1; $P < .001$). Applying the Poisson model (Fig 1) revealed a significant correlation between alcohol intake and severity of rhinophyma. Multivariate analysis showed a strong association with family history of rhinophyma (OR, 160.7; 95% CI, 27.3-944.6) and diabetes (OR, 6.45; 95% CI, 2.29-18.2), but not with other parameters (Table I).

The role of alcohol in rosacea has long been debated, but studies addressing rhinophyma directly are rare and controversial.[1-4] The only such study was retrospective, showing that of the 45 individuals with rhinophyma, 22% were excessive drinkers versus 8% of the 45 controls, with no difference in

Table I. Complementary clinical data: Univariate and multivariate analysis

Associations		Cases	Controls	Univariate analysis OR	*P* value	Multivariate analysis OR	*P* value
Median BMI		28.7 kg/m^2	26.8 kg/m^2	**1.10**	**.003**	1.06	.268
Family history of rhinophyma		46% (n = 23)	1.3% (n = 2)	**65.6**	**<.001**	**160.7**	**<.001**
Phototype							
	I	0	4.5% (n = 7)	Reference		Reference	
	II	38.5% (n = 20)	35.3% (n = 55)				
	III	51.9% (n = 27)	40.4% (n = 63)				
	IV	9.6% (n = 5)	19.2% (n = 30)	0.43	.098	0.60	.45
	VI	0	0.6% (n = 1)				
	VI	0	0				
Professional sun exposure		34.6% (n = 18)	41.7% (n = 65)	0.74	.369		
Smoking							
	None	28.8% (n = 15)	49.4% (n = 77)	Reference		Reference	
	Active	53.8% (n = 28)	35.3% (n = 55)	1.92	.174	0.83	.816
	Past	17.3% (n = 9)	15.4% (n = 24)	**2.61**	**.009**	1.67	.337
Liver disease							
	Chronic	3.9% (n = 2)	6.4% (n = 10)	0.58	.497		
	Alcoholic	3.9% (n = 2)	1.3% (n = 2)				
Type 2 diabetes mellitus		42.3% (n = 22)	16.7% (n = 26)	**3.67**	**<.001**	**6.45**	**<.001**
Dyslipidemia		48.1% (n = 25)	35.3% (n = 55)	1.70	.102	2.03	.150
Hypertension		65.4 (n = 34)	48.7% (n = 76)	**1.99**	**.039**	1.17	.758

Bold indicates statistically significant results.
BMI, Body mass index; *OR*, odds ratio.

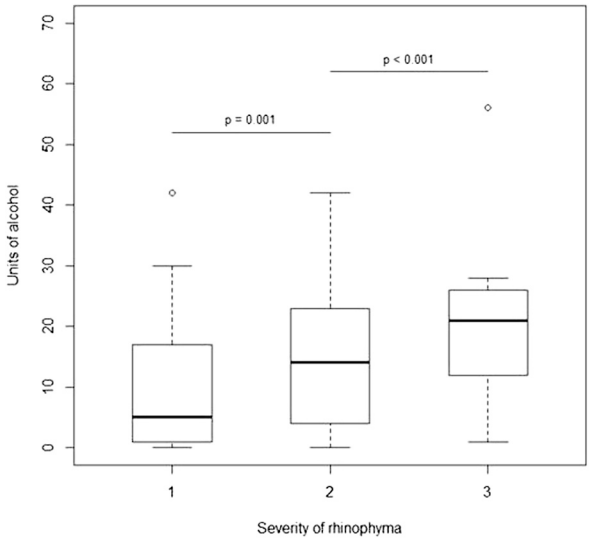

Fig 1. Alcohol intake according to severity of rhinophyma.

median weekly alcohol intake.[5] Our study shows a highly significant association with alcohol, with the OR increasing as intake goes up, and a correlation between the amount of alcohol consumed and severity of rhinophyma. There is an association with telangiectasia, and cases of phyma developed at the surface of hemangiomas or capillary malformation, suggesting a critical role of vascular changes. As alcohol is a strong inducer of flushing and vasodilatation, it might play a role in the vascular background necessary for skin thickening on the nose. A genetic predisposition for rosacea exists, but a family background of rhinophyma had been suggested only in case reports. We show that male sex and family history are major risk factors; genetic predisposition is probably critical, as alcohol is not sufficient to induce rhinophyma. Moreover, only a minority of patients with rosacea develop phymas (ie, skin hypertrophy with large sebaceous glands), which might also be related to alcohol abuse.

Association of rosacea with diabetes is controversial. Our study suggests a significant link with rhinophyma; no satisfactory explanation has yet been found, except for a comparison with abnormal growth and leakage of capillaries in diabetic microangiopathy, resulting in edema and functional tissue impairment, as is observed in rosacea. This remains to be explored.

Our study is, to our knowledge, the first to provide convincing epidemiologic arguments to support the age-old supposition of a link between alcohol and rhinophyma and suggests—at least in predisposed individuals—a possible causal role.

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Funding sources: None.

Conflicts of interest: None disclosed.

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Drugs used for neurologic and psychiatric conditions increase the risk for bullous pemphigoid: A case–control study

To the Editor: The association between neurologic diseases and bullous pemphigoid (BP) is well established.[1] However, it has not yet been established whether drugs that affect the nervous system can influence the onset of BP. The aim of this

Table I. Demographics of bullous pemphigoid patients and basal cell carcinoma controls

Characteristic	Cases, n = 3397, n (%)	Controls, n = 12,941, n (%)*
Sex		
Female	2028 (59.7)	7766 (60.0)
Male	1369 (40.3)	5175 (40.0)
Mean age, years	76.6	76.7

*Age, sex, and year of diagnosis matched in a 1:4 ratio. Due to the availability of drug reimbursement data, 579 patients had fewer than the intended 4 controls.