

Napule è...

PEDIATRIA PREVENTIVA E SOCIALE

La Corticofobia

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LUCI OMBRE ABBAGLI

Prevenzione

Allergologia

Gastroenterologia

Nutrizione

Dermatologia

U.O.S. Immuno-Allergologia dell'Età
Evolutiva - Ospedale S. Pietro-
Fatebenefratelli
Roma

28 APRILE - 1 MAGGIO 2018
Hotel Royal Continental, Napoli



Corticofobia

Definizione

Apprensione, ansia, paura, timore, inquietudine, allarme, tensione, dubbio, scrupolo, tensione

JAMA Dermatology | Review

Topical Corticosteroid Phobia in Atopic Dermatitis A Systematic Review 2017

Alvin W. Li, BS; Emily S. Yin, BS; Richard J. Antaya, MD

Originally used to describe an irrational fear of corticosteroids, the definition of TCS phobia has since been broadened to include the vague negative feelings and beliefs about TCSs held by patients.⁹ Some authors have suggested that TCS phobia is a misnomer given the potential for long-term adverse effects from high-dose TCS use and that this phenomenon is likely to have been borne from misinformation as opposed to irrationality.^{10,11} It would follow, then, that

Evaluation of the influence of family and friends, and the Internet on patient perceptions of long-term topical corticosteroid use

Saxon D Smith MBChB MHL FADC, Lisa L Farrugia BS, Victoria Harris MBBS LLB, Andrew Lee MBBS MMed, Alex Blaszczyński PhD & Gayle Fischer MBBS (Hons) MD FADC







JAMA Dermatology | Review

Topical Corticosteroid Phobia in Atopic Dermatitis A Systematic Review

Alvin W. Li, BS; Emily S. Yin, BS; Richard J. Antaya, MD

ORIGINAL ARTICLE

Evaluation of the influence of pharmacists and GPs on patient perceptions of long-term topical corticosteroid use

Lisa L. Farrugia^a , Andrew Lee^{a,b} , Gayle Fischer^{a,b,c} , Alex Blaszczyński^d , Stephen R. Carter^e  and Saxon D. Smith^{a,b,f} 

El Hachem et al. *Italian Journal of Pediatrics* (2017) 43:22
DOI 10.1186/s13052-017-0330-7

Italian Journal of Pediatrics

RESEARCH

Open Access



Topical corticosteroid phobia in parents of pediatric patients with atopic dermatitis: a multicentre survey

Maya El Hachem¹, Francesco Gesualdo² , Giampaolo Ricci³, Andrea Diodati¹, Loredana Giraldi¹, Orsola Ametrano⁴, Corrado Occella⁵, Anna Belloni Fortina⁶, Mirella Miliotto⁷, Fabio Arcangeli⁸, Oriana Simonetti⁹, Simona Giancristoforo¹, Elisabetta Calamelli³, Carlo Mazzatenta¹⁰ and Iria Neri¹¹

Factors contributing to poor childhood atopy

Australasian Journal of
Dermatology

in

Anna Sokolova¹ and Saxon D Smith^{2,3}

ORIGINAL ARTICLE

Experimental Allergy and Immunology

WILEY **Allergy**

Topical corticosteroid phobia in atopic dermatitis: International feasibility study of the TOPICOP score

J.-F. Stalder¹ , H. Aubert¹, E. Anthoine², M. Futamura⁴, D. Marcoux⁵

Corticofobia

Letteratura 2017-2018

Fenomeno diffuso-interculturale

Topical corticosteroid concerns from the clinicians' perspective

Simon M. Mueller, Dominique Tomaschett, Deborah R. Vogt, Peter Itin, Antonio Cozzio & Christian Surber

Adherence to Medication

Lars Osterberg, M.D., and Terrence Blaschke, M.D.

Drugs don't work in patients who don't take them.

—C. Everett Koop, M.D.

Adherence in dermatology

Christine S. Ahn, Leonora Culp, William W. Huang, Scott A. Davis & Steven R. Feldman

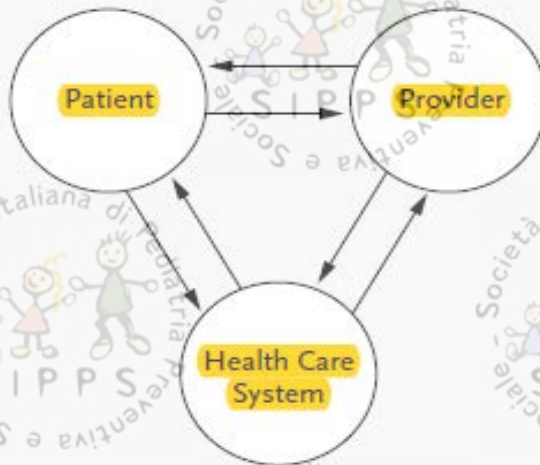
L'aderenza è la misura in cui il comportamento di un paziente si attiene a quanto concordato con il suo medico (medicine, dieta, stile di vita). E' centrata sui sintomi e sul vissuto individuale del paziente e comprende anche il concetto di persistenza (continuità e soddisfazione d'uso). L'aderenza implica un «prendere insieme le decisioni» (medico-paziente), presuppone che il paziente sia messo in condizioni di capire le indicazioni fornite e che si instauri un rapporto di fiducia medico-paziente.

Nel 2003, il WHO stimava una media di aderenza del 50% nelle malattie croniche ed una media ancora più bassa se si utilizzavano trattamenti topici, che richiedono più tempo e possono essere più confondenti.

Poor provider-patient communication
 Patient has a poor understanding of the disease
 Patient has a poor understanding of the benefits and risks of treatment
 Patient has a poor understanding of the proper use of the medication
 Physician prescribes overly complex regimen

Fattori che influenzano l'ADERENZA

1. Fattori associati al paziente
2. alla terapia
3. a chi la prescrive
4. al Sistema Sanitario



La non-aderenza ha diverse conseguenze: peggioramento delle condizioni cliniche e della qualità di vita, comorbidità, costi e mortalità

Patient's interaction with the health care system
 Poor access or missed clinic appointments
 Poor treatment by clinic staff
 Poor access to medications
 Switching to a different formulary
 Inability of patient to access pharmacy
 High medication costs

Physician's interaction with the health care system
 Poor knowledge of drug costs
 Poor knowledge of insurance coverage of different formularies
 Low level of job satisfaction

Figure 2. Barriers to Adherence.

The interactions among the patient, health care provider, and health care system depicted are those that can have a negative effect on the patient's ability to follow a medication regimen.

Topical Corticosteroid Phobia in Atopic Dermatitis A Systematic Review

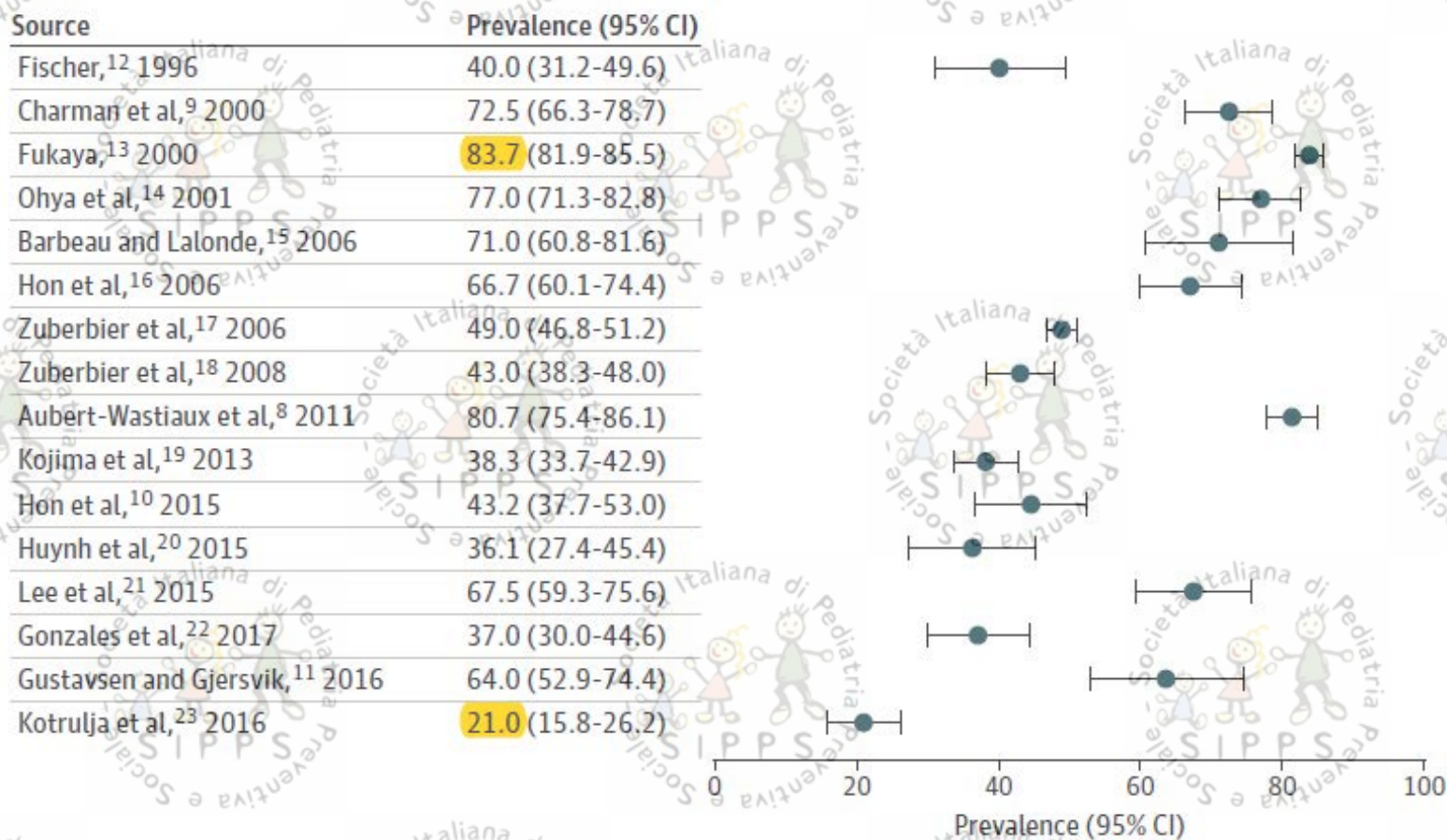
2017

Alvin W. Li, BS; Emily S. Yin, BS; Richard J. Antaya, MD

Corticofobia Prevalenza

multinational sample surveyed by Zuberbier et al¹⁷ consisted of 8 countries (United States, France, Germany, Spain, United Kingdom, the Netherlands, Mexico, and Poland).

Figure. Prevalence of Topical Corticosteroid (TCS) Phobia



Topical Corticosteroid Phobia in Atopic Dermatitis A Systematic Review

2017

Corticofobia Timori

Alvin W. Li, BS; Emily S. Yin, BS; Richard J. Antaya, MD

Table 2. Concerns Related to Topical Corticosteroid Phobia

Source	Sample Size, No.	Concern Ranking				
		First	Second	Third	Fourth	Fifth
Charman et al, ⁹ 2000 ^a	200	Skin thinning: 34.5% (95% CI, 27.9%-41.1%)	Nonspecific long-term effects: 24.0% (95% CI, 18.1%-29.9%)	Growth and development: 9.5% (95% CI, 5.4%-13.6%)	Aging/wrinkling: 3.5% (95% CI, 1.0%-6.0%)	Changes in skin color: 3.0% (95% CI, 0.6%-5.4%)
Zuberbier et al, ¹⁷ 2006	2002	Skin thinning: 28.0% (95% CI, 26.0%-30.0%)	Treatment resistance: 18.0% (95% CI, 16.3%-19.7%)	Skin bleaching: 17.0% (95% CI, 15.4%-18.6%)	Burning sensation: 15.0% (95% CI, 13.4%-16.6%)	Rebound symptoms: 15.0% (95% CI, 13.4%-16.6%)
Hon et al, ¹⁶ 2006 ^a	165	Growth and development: 30.3% (95% CI, 23.3%-37.3%)	Skin thinning: 27.3% (95% CI, 20.5%-34.1%)	Miscellaneous ^b : 12.7% (95% CI, 7.6%-17.8%)	Other skin adverse effects besides thinning ^c : 10.3% (95% CI, 5.7%-14.9%)	Affects liver/kidney function: 7.7% (95% CI, 3.6%-11.8%)
Hon et al, ¹⁰ 2015 ^a	161	Skin thinning: 55.3% (95% CI, 47.3%-62.7%)	Other skin adverse effects ^c : 16.1% (95% CI, 10.3%-21.7%)	Growth and development: 16.1% (95% CI, 10.3%-21.7%)	"Don't know": 13.7% (95% CI, 8.4%-19.0%)	Bone problems: 13.0% (95% CI, 7.8%-18.2%)

^a Percentages do not sum to 100% since the study population reported more than 5 concerns.

^b Including effects on sexual characteristics, endocrine system, respiratory

system, circulatory system, musculoskeletal system, health in general, oncogenesis, and obesity.

^c Including pigmentation, thickening, atrophy, irritation, and texture.



Corticofobia Timori

Topical corticosteroid phobia in parents of pediatric patients with atopic dermatitis: a multicentre survey

Maya El Hachem¹, Francesco Gesualdo^{2*}, Giampaolo Ricci³, Andrea Diociaiuti¹, Loredana Giraldi¹, Orsola Ametrano⁴, Corrado Occella⁵, Anna Belloni Fortina⁶, Mirella Millo⁷, Fabio Arcangeli⁸, Oriana Simonetti⁹, Simona Giancristoforo¹, Elisabetta Calamelli³, Carlo Mazzatenta¹⁰ and Iria Neri¹¹

Response to questions on TCS specific fears and on behaviors regarding TCS use

Sono efficaci

Fears and beliefs	Category	I completely disagree	I don't really agree	I agree to a certain extent	I completely agree
TCS are effective over a short time period	E	12 (4%)	25 (9%)	84 (30%)	155 (56%)
TCS are effective over a long time period	E	81 (30%)	58 (21%)	100 (37%)	83 (12%)
TCS become inefficient over time	E	31 (12%)	39 (14%)	110 (41%)	89 (33%)
TCS calm symptoms but don't treat the cause	E	24 (9%)	25 (9%)	67 (24%)	159 (58%)
TCS make eczema worse	E	152 (57%)	58 (22%)	43 (16%)	15 (6%)
TCS stop the eczema from coming up to the surface of the skin	E	33 (12%)	37 (14%)	72 (27%)	129 (48%)
TCS treatment takes time and effort	E	89 (32%)	74 (27%)	73 (27%)	38 (14%)

Passano nel sangue

TCS can lead to infections

TCS make you fat

Danneggiano la pelle

TCS will affect my future health

There is a dependency risk

I can become resistant to TCS

TCS can lead to asthma

Paura dei TCS in generale

TCS are more dangerous than CS in tablet form

I'm afraid of applying too much cream

I'm afraid of using the cream for too long

I'm afraid of putting cream on certain zones like the eyelids; where the skin is thinner

It's more dangerous to use TCS on children than on adults

I am careful to rub the cream in well when I apply it

Evito uso nelle mani

Ho bisogno di assicurazioni

E efficacy, S safety, Q quality of life, C compliance

Category	I completely disagree	I don't really agree	I agree to a certain extent	I completely agree
S	66 (25%)	40 (15%)	92 (35%)	67 (25%)
S	147 (56%)	55 (21%)	40 (15%)	22 (8%)
S	120 (44%)	40 (15%)	69 (25%)	42 (15%)
S	59 (22%)	44 (16%)	104 (38%)	65 (24%)
S	93 (35%)	51 (19%)	90 (33%)	35 (13%)
S	90 (33%)	35 (13%)	84 (31%)	62 (23%)
S	42 (16%)	44 (17%)	107 (40%)	72 (27%)
S	181 (72%)	36 (14%)	29 (11%)	7 (3%)
S	43 (16%)	43 (16%)	102 (38%)	82 (30%)
S	177 (66%)	37 (14%)	35 (13%)	18 (7%)
S	76 (29%)	114 (44%)	58 (22%)	11 (4%)
S	49 (19%)	104 (40%)	77 (30%)	28 (11%)
S	47 (18%)	70 (27%)	71 (27%)	73 (28%)
S	42 (16%)	72 (28%)	75 (29%)	72 (28%)
S	11 (4%)	27 (10%)	71 (27%)	151 (58%)
S	78 (30%)	46 (18%)	32 (12%)	102 (40%)
S	44 (17%)	72 (27%)	61 (23%)	87 (33%)

Topical corticosteroid phobia in parents of pediatric patients with atopic dermatitis: a multicentre survey

Maya El Hachem¹, F
Orsola Ametrano², C
Simona Giancristofa

Ital.J.Pediatrics 2017

Orlando¹,
Oriana Simonetti²

Corticofobia Timori

TCS treatment is complicated

TCS treatment helps me improve my quality of life

TCS increase my well-being

I vantaggi superano gli svantaggi

Category	I completely disagree	I don't really agree	I agree to a certain extent	I completely agree
Q	157 (58%)	57 (21%)	38 (14%)	19 (7%)
Q	26 (9%)	27 (10%)	122 (44%)	100 (36%)
Q	36 (13%)	31 (11%)	115 (42%)	91 (33%)
Q	23 (8%)	44 (16%)	120 (44%)	87 (32%)

Table 4. Adverse effects of CS use of most concern to parents.

Correlations among steroid fear, acceptability, usage frequency, quality of life and disease severity in childhood eczema

Kam Lun Hon¹, Yin Ching K. Tsang¹, Nga Hin Pong¹, David C. K. Luk², Vivian W. Lee³, Wing Man Woo⁴, Chak Yiu Justin Lam⁴, Yun Ting Eunice Yeung⁴, Yiu Shing Sunny Chau⁴, Ka Kam Kenneth Chui¹, Ka Hin Gabriel Li⁴, and Ting Fan Leung¹

Journal of
Dermatological
Treatment **2016**

	Mild eczema (n = 50) (%)	Moderate/severe eczema (n = 111) (%)	p Value
Skin thinning	24 (48.0)	65 (58.6)	0.212
Other skin problems	5 (10.0)	21 (18.9)	0.155
Growth	7 (14.0)	19 (17.1)	0.619
Liver kidney	2 (4.0)	6 (5.4)	>0.999 ^a
Immune	1 (2.0)	1 (0.9)	0.526 ^a
CS resistance	2 (4.0)	3 (2.7)	0.646 ^a
CS dependence	5 (10.0)	7 (6.3)	0.518 ^a
Body hair	2 (4.0)	4 (3.6)	>0.999 ^a
Eye problem	1 (2.0)	8 (7.2)	0.276 ^a
Bone problem	4 (8.0)	17 (15.3)	0.202
Miscellaneous	4 (8.0)	10 (9.0)	>0.999 ^a
Don't know	13 (26.0)	9 (8.1)	0.002

^aFisher's exact test.

Bold values represent statistical significance.

GUIDA PRATICA SULL'USO DEI CORTISONICI NELLE PATOLOGIE DERMATOLOGICHE DELL'ETÀ PEDIATRICA



**Corticofobia
Timori**

Ma questa paura è giustificata ?



Table II. Adverse effects of topical corticosteroids

J. Am. Acad. Dermatol. 2006

CONTINUING MEDICAL EDUCATION

Adverse effects of topical glucocorticosteroids

Atrophic changes

Steroid atrophy
Telangiectasia
Striae
Purpura
Stellate pseudoscars
Ulceration
Easy bruising

Infections

Masked microbial infections (tinea incognito)
Aggravation of cutaneous candidiasis, herpes or demodex
Reactivation of Kaposi sarcoma
Granuloma gluteale infantum

Ocular changes



Ocular hypertension
Glaucoma, cataract

Pharmacologic effects

Steroid rebound, steroid addiction, tachyphylaxis

Miscellaneous

Steroid acne
Perioral dermatitis
Steroid rosacea
Hirsutism
Hyperpigmentation
Hypopigmentation
Photosensitization
Rebound flare (psoriasis)

- 
- Reazioni allergiche da contatto per sensibilizzazione al principio attivo e/o eccipienti (prevalenza : 0.2 -6%)
- 

Reazioni avverse sistemiche

Soppressione asse ipofisi-surrene (*rarissima*)

(Mooney 2015, Australasian consensus statement;
Levin 2014, J.Dermatol.Treatment)

Corticosteroide dipendenza (*rara in pediatria*)

Rarissime in pediatria

- Sindrome di Cushing
- Ipertensione arteriosa
- Diabete mellito
- Osteoporosi

(Spada 2018, Australasian J.Dermatol.; Sidgiddi 2018, J.Clin Aesthet Dermatol; Hong 2011, Pediatr Dermatol.)

Si consiglia una *valutazione clinica periodica* solo se si usano steroidi potenti /molto e per lunga durata.

- Raccomandazione B Evidenza III (reazioni topiche)
- Raccomandazione C Evidenza III (reazioni sistemiche)

GUIDA PRATICA SULL'USO DEI CORTISONICI NELLE PATOLOGIE DERMATOLOGICHE DELL'ETÀ PEDIATRICA



**Corticofobia
Timori**

**La paura non è
assolutamente giustificata !**

*Quando i CST sono correttamente
applicati, il beneficio supera ampiamente
il rischio dei rari effetti collaterali,
peraltro ben noti e facilmente evitabili !*



Topical Corticosteroid Phobia in Atopic Dermatitis A Systematic Review

2017

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Corticofobia

Fonti di influenza

Table 3. Sources From Which Patients Receive Information About TCSs

Source	Sample Size, No.	Frequency Ranking of TCS Information Source				
		First	Second	Third	Fourth	Fifth
Charman et al, ⁹ 2000 ^a	200	General practitioners: 33.0% (95% CI, 26.5%-39.5%)	Magazines/newspapers: 17.5% (95% CI, 12.2%-22.8%)	Friends: 14.5% (95% CI, 9.6%-19.4%)	Family: 11.5% (95% CI, 7.1%-15.9%)	Pharmacist: 10.5% (95% CI, 6.3%-14.7%)
Hon et al, ¹⁶ 2006 ^b	165	Doctors ^c : 65.0% (95% CI, 57.9%-72.1%)	Newspapers: 62.0% (95% CI, 54.7%-69.3%)	Friends/relatives: 57.0% (95% CI, 49.6%-64.4%)	Television: 52.0% (95% CI, 44.5%-59.5%)	Internet: 17.0% (95% CI, 11.4%-22.6%)
Lee et al, ²¹ 2015 ^b	126	Internet: 49.2% (95% CI, 40.5%-57.9%)	Television/broadcasting media: 45.2% (95% CI, 36.5%-53.9%)	Doctors/health care professionals ^c : 37.3% (95% CI, 28.9%-45.7%)	Magazines/newspapers: 34.1% (95% CI, 25.8%-42.4%)	NR
Gustavsen and Gjersvik, ¹¹ 2016 ^b	77	Dermatologists: 70.0% (95% CI, 59.8%-80.2%)	General practitioners: 55.0% (95% CI, 43.9%-66.1%)	Package leaflets: 46.0% (95% CI, 34.9%-57.1%)	Pharmacies: 48.0% (95% CI, 27.2%-48.8%)	NR

Abbreviations: NR, not recorded; TCS, topical corticosteroid.

^a Percentages do not sum to 100% since the study population reported more^b Percentages do not sum to 100% since the study population was allowed to report more than 1 source of information.

Evaluation of the influence of pharmacists and GPs on patient perceptions of long-term topical corticosteroid use

Lisa L. Farrugia^a, Andrew Lee^{a,b}, Gayle Fischer^{a,b,c}, Alex Blaszczyński^d, Stephen R. Carter^e and Saxon D. Smith^{a,b,f}

Corticofobia Fonti di influenza

JOURNAL OF DERMATOLOGICAL TREATMENT, 2017
VOL. 28, NO. 2, 112–118

Table 4. Messages received from GPs and pharmacists, with Wilcoxon signed-rank test results.

Question stem: "The following are some messages that people receive about using TCS for their [child's] inflamed skin. Please indicate *how often* these messages have been received by you from each of the sources below. Please tick one circle for each statement from each source."

Category (not indicated on survey)	Statement	GPs				Pharmacists				Respondents for both questions, <i>p</i> values
		"Never" or "Rarely", <i>n</i> (%)	"Sometimes", <i>n</i> (%)	"Often" or "Always", <i>n</i> (%)	Missing, <i>n</i>	"Never" or "Rarely", <i>n</i> (%)	"Sometimes", <i>n</i> (%)	"Often" or "Always", <i>n</i> (%)	Missing, <i>n</i>	
Benefits	Ha bisogno di CTS	25 (13.8%)	44 (24.3%)	112 (61.9%)	20	72 (50.7%)	28 (19.7%)	42 (29.6%)	59	<i>n</i> = 139 <i>p</i> < 0.001*
	CTS migliora	18 (9.8%)	32 (17.5%)	133 (72.7%)	18	51 (35.7%)	19 (13.3%)	73 (51.0%)	58	<i>n</i> = 140 <i>p</i> < 0.001*
	"Using TCS is good for inflamed skin"	24 (13.6%)	48 (27.1%)	105 (59.3%)	24	53 (35.8%)	30 (20.3%)	65 (43.9%)	53	<i>n</i> = 144 <i>p</i> < 0.001*
	continuare nel tempo	34 (19.1%)	35 (19.7%)	109 (61.2%)	23	69 (47.6%)	20 (13.8%)	56 (38.6%)	56	<i>n</i> = 140 <i>p</i> < 0.001*
Harms	[child] need[s] to continue using TCS whenever necessary									
	Causa atrofia	107 (60.5%)	37 (20.9%)	32 (18.6%)	24	100 (60.6%)	25 (15.2%)	40 (24.2%)	36	<i>n</i> = 160 <i>p</i> = 0.087
	Try non-prescription creams/ointments before resorting to the use of prescription TCS	112 (64.7%)	35 (20.2%)	26 (15.0%)	28	99 (65.1%)	31 (20.4%)	22 (14.5%)	49	<i>n</i> = 145 <i>p</i> = 0.433
	"Try natural or complementary and alternative therapies before resorting to the use of TCS"	134 (80.2%)	21 (12.6%)	12 (7.2%)	34	114 (76.5%)	19 (12.8%)	16 (10.7%)	52	<i>n</i> = 141 <i>p</i> = 0.039*
Applicare pochissimo		38 (21.2%)	42 (23.5%)	99 (55.3%)	22	48 (30.0%)	18 (11.3%)	94 (58.8%)	41	<i>n</i> = 153 <i>p</i> = 0.185
		86 (49.4%)	36 (20.7%)	52 (29.9%)	27	73 (46.8%)	28 (17.9%)	55 (35.3%)	45	<i>n</i> = 150 <i>p</i> = 0.072
	"TCS may make my [child's] immune system less effective"	147 (83.1%)	22 (12.4%)	8 (4.5%)	24	132 (86.8%)	13 (8.6%)	7 (4.6%)	49	<i>n</i> = 148 <i>p</i> = 0.234

Evaluation of the influence of pharmacists and GPs on patient perceptions of long-term topical corticosteroid use

Corticofobia Fonti di influenza

Lisa L. Farrugia^a, Andrew Lee^{a,b}, Gayle Fischer^{a,b,c}, Alex Blaszczyński^d, Stephen R. Carter^e and Saxon D. Smith^{a,b,f}

Patients and parents report having negative TCS-related counseling experiences with both pharmacists and GPs, but these negative experiences occur more frequently with pharmacists. These findings indicate a need for reeducation of both pharmacists and GPs on the safety of TCS use and the potential impact of their counseling on treatment adherence.

pondents for
h questions,
p values

Statement	"Disagree", n (%)	n (%)	Agree", n (%)	n	"Disagree", n (%)	n (%)	Agree", n (%)	n	
"Provide useful advice on how to deal with the practical difficulties of regularly applying TCS"	26 (14.4%)	44 (24.3%)	111 (61.3%)	20	43 (27.7%)	46 (29.7%)	66 (42.5%)	46	n = 152 p < 0.001*
"Provide me with a sufficient amount of information about using TCS"	30 (16.3%)	38 (20.7%)	116 (63.3%)	17	40 (25.0%)	42 (26.3%)	78 (48.8%)	41	n = 152 p = 0.010*
"Notice when I have not requested/refilled TCS prescriptions in a long time, and ask why this is the case"	93 (62.0%)	29 (19.3%)	28 (18.7%)	51	101 (73.2%)	29 (21.0%)	8 (5.8%)	63	n = 131 p = 0.001*
"Make me feel reassured about using TCS"	22 (12.4%)	53 (29.8%)	103 (57.9%)	23	52 (34.9%)	60 (40.3%)	37 (24.8%)	52	n = 145 p < 0.001*
"Listen to my concerns about using TCS"	17 (10.4%)	51 (31.3%)	95 (58.3%)	38	23 (17.7%)	64 (49.2%)	43 (33.1%)	71	n = 127 p < 0.001*
"Treat me [and my child] with respect when speaking about TCS"	7 (3.9%)	35 (19.6%)	137 (76.5%)	22	15 (10.2%)	44 (29.9%)	88 (59.9%)	54	n = 142 p = 0.002*
"Make me [and/or my child] feel embarrassed about using TCS"	151 (87.3%)	18 (10.4%)	4 (2.3%)	28	115 (77.2%)	20 (13.4%)	13 (8.4%)	52	n = 144 p < 0.001*
"Demonstrate sensitivity towards the physical appearance of my [child's] skin"	16 (9.5%)	36 (21.4%)	116 (69.0 %)	33	20 (15.5%)	37 (28.7%)	72 (55.8%)	72	n = 124 p = 0.006*

*Statistical significance.

Topical corticosteroid concerns from the clinicians' perspective

2017

Simon M. Mueller, Dominique Tomaschett, Deborah R. Vogt, Peter Itin, Antonio Cozzio & Christian Surber



Corticofobia Fonti di influenza

The clinician's own concerns about using TCS

Conclusions

To summarise, clinicians underestimated the prevalence of TCC and the resulting non-adherence to TCS, but they had accurate knowledge of the patient characteristics related to TCC and the impact of patient information about TCS. However, only 30% of the clinicians had good knowledge of the most common concern and the reasons for TCC. This weakness underpins the importance of thorough exploration of the concerns about using TCS. The One hundred forty-four out of 194 clinicians (74%) stated they had concerns to use TCS themselves. Most of them had only minor concerns (VAS = 1 or 2), however some clinicians had even strong concerns (Figure 4). Dermatologists (median 2.0, IQR 1.0–4.0) had significantly less concerns compared to non-dermatologists (median 4.0, IQR 3.0–5.0; Wilcox test p values $<.001$). Concerns were slightly stronger in female clinicians (median 3.0, IQR 2.0–5.0 versus median 2.25, IQR 1.0–4.0; $p = .054$).

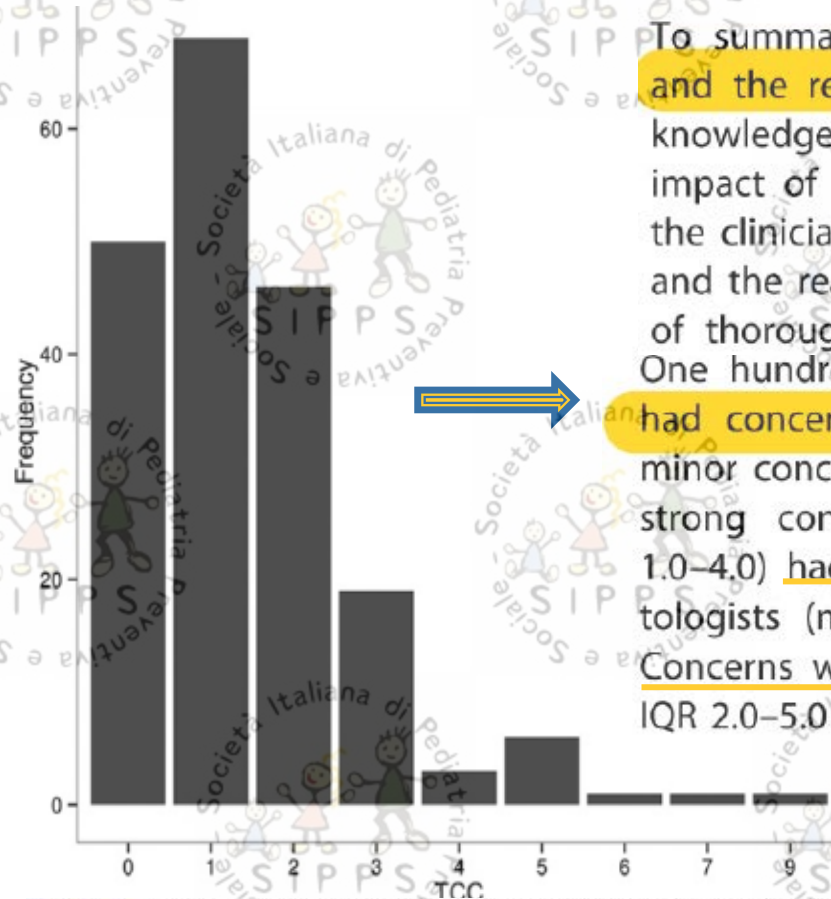


Figure 4. Intensity distribution of the clinician's own concerns about using TCS. Intensity is indicated on a discrete VAS from 0 to 10 (no one rated 10).

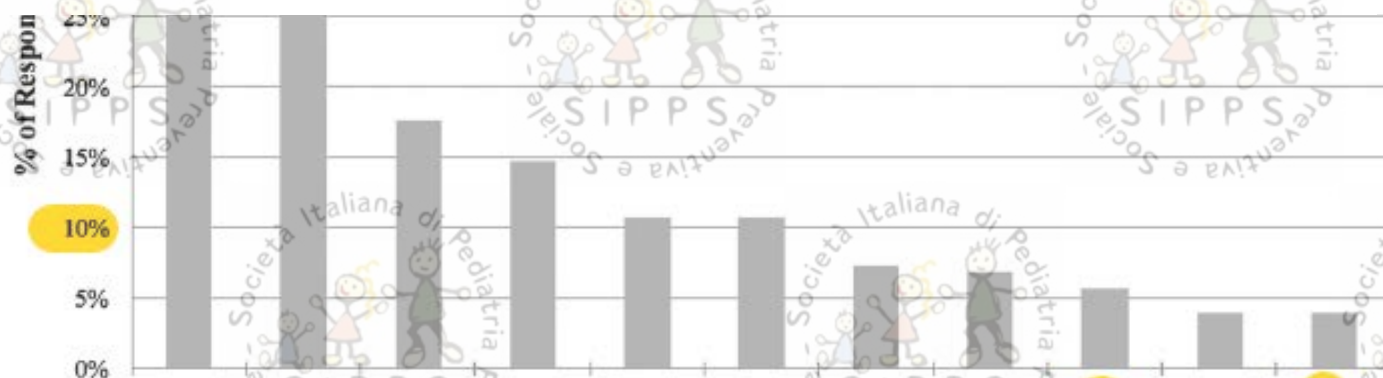
Evaluation of the influence of pharmacists and GPs on patient perceptions of long-term corticosteroid use

Lisa
Saxr

Schema 1. Cosa ci dicono gli studi?

La corticofobia è sostenuta da:

- scarsa conoscenza e confusione sull'attività degli steroidi;
- carente o assente informazione sulle modalità di applicazione;
- interferenze esterne;
- mancanza di fiducia anche da parte del personale sanitario.



Topical Corticosteroid Phobia in Atopic Dermatitis A Systematic Review

Alvin W. Li, BS; Emily S. Yin, BS; Richard J. Antaya, MD

2017

Corticofobia
Cosa possiamo fare ?

Conclusions

Topical corticosteroid phobia is a pervasive and global phenomenon that has implications for patient adherence and treatment outcomes in AD. Improved standardization of the definition and assessment of this phenomenon is needed, as the variability found in the studies precludes purposeful comparison and extrapolation of the data for clinical application. Additional studies, using standardized methods of assessment to further characterize and understand this important phenomenon, are needed. Future research endeavors should work toward the development of well-controlled studies assessing interventions that may reduce TCS phobia and improve treatment outcomes in AD.

1.

2.



Topical corticosteroid phobia in atopic dermatitis: International feasibility study of the TOPICOP score

Allergy

EUROPEAN JOURNAL OF ALLERGY
AND CLINICAL IMMUNOLOGY



2017

J.-F. Stalder¹ | H. Aubert¹ | E. Anthoine² | M. Futamura⁴ | D. Marcoux⁵ |

TOPICOP

Your doctor has prescribed or is prescribing topical corticosteroids for you or your child, to be applied to the affected skin. Through this questionnaire we would like to know your feelings about this type of treatment.

For each question, mark the answer that best fits your opinion.

Mark one box per line

Topical corticosteroids can be absorbed into the bloodstream.

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

Topical corticosteroids can lead to infections.

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

Topical corticosteroids can make you fat

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

Topical corticosteroids damage your skin.

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

Topical corticosteroids will affect your future health negatively

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

Using topical corticosteroids can lead to asthma.

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

I am afraid of putting topical corticosteroids on certain skin areas such as eyelids.

☐ Absolutely not ☐ Not really ☐ A little ☐ Absolutely ☐ I do not understand the statement

I do not know of any side effects, but I am still afraid of using topical corticosteroids

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

I am afraid of applying too much topical corticosteroids.

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

I wait as long as I can before treating myself or my child with topical corticosteroids.

☐ never ☐ sometimes ☐ often ☐ always ☐ I do not understand

I stop topical corticosteroid treatment as soon as I can.

☐ never ☐ sometimes ☐ often ☐ always ☐ I do not understand

I need reassurance about topical corticosteroids.

☐ Not at all ☐ Not really ☐ To some extent ☐ Absolutely ☐ I do not understand the statement

Corticofobia

Cosa possiamo fare ?

1.

TOPICOP

Score validato in 15 Nazioni

The TOPICOP questionnaire includes 12 items assessing concerns about TCS scored on a 4-point Likert scale. Depending on the question, the

Table 3. Strategies for Improving Adherence to a Medication Regimen.*

Identify poor adherence

Look for markers of nonadherence: missed appointments ("no-shows"), lack of response to medication, missed refills

Ask about barriers to adherence without being confrontational

Emphasize the value of the regimen and the effect of adherence

Elicit patient's feelings about his or her ability to follow the regimen, and if necessary, design supports to promote adherence

Provide simple, clear instructions and simplify the regimen as much as possible

Encourage the use of a medication-taking system

Listen to the patient, and customize the regimen in accordance with the patient's wishes

Obtain the help from family members, friends, and community services when needed

Reinforce desirable behavior and results when appropriate

Consider more "forgiving" medications when adherence appears unlikely†

Medications with long half-lives

Depot (extended-release) medications

Transdermal medications

2.

Educazione
terapeutica

GUIDA PRATICA SULL'USO DEI CORTISONICI NELLE PATOLOGIE DERMATOLOGICHE DELL'ETÀ PEDIATRICA



Alcuni suggerimenti per migliorare l'aderenza

includono:

- considerare il tipo, la sede delle lesioni e lo stile di vita del paziente;
- limitare l'impiego di topici a superfici inferiori al 5-10%;
- coinvolgere il paziente nella scelta del farmaco e nelle modalità di trattamento;
- limitare il numero di prodotti e la complessità della prescrizione;
- prescrivere topici in veicoli con maggior probabilità di accettazione;
- istruire riguardo alla quantità di prodotto da usare e alle modalità di applicazione (istruzioni scritte);
- spiegare le diverse fasi del trattamento (induzione e mantenimento);
- verificare che il paziente abbia capito;
- proporre visite regolari;

Anna Sokolova¹ and Saxon D Smith^{2,3}

Improving treatment adherence

Optimisation of the patient/caregiver-clinician relationship

Grade of recommendation: B (level 2b evidence)

Patient education

Grade of recommendation: A (level 1b evidence)

Written eczema action plans

Grade of recommendation: B (level 2b evidence)

Other education adjuncts

Grade of recommendation: C (level 4 evidence)

Targeted education regarding TCS

Grade of recommendation: B (level 2b evidence)

Early and frequent follow up

Grade of recommendation: B (level 2b evidence)

Improving quality of life



Prescribing success: Developing an integrated prescription and eczema action plan for atopic dermatitis



Maxwell B. Sauder, MD, FRCPC,^a Alana McEvoy, MD,^a and Michele Louise Ramien, MD, FRCPC^b
^aOttawa, Ontario, Canada

Key words: action plan; atopic dermatitis; eczema; integrated prescription; patient education; quality of life; written action plan.

Table I. Suggested characteristics of an eczema action plan

1. Written set of instructions that stays with the patient
2. Step-wise approach to management with 3 situations: daily management, eczema worsening, and eczema out of

Istruzioni scritte

the prescribed medication regimen. In one study evaluating the influence of patient education on TCS phobia, a 10- to 15-minute educational session led by a dermatologist with written instructions resulted in a 43.2% decrease in the phobia index score.²¹

Table II. Possible components of clinical zones for management of atopic dermatitis⁹⁻¹²

Green: Eczema under control

Yellow: Eczema worsening

Red: Eczema out of control

Daily moisturizer \pm prophylactic; intermittent use of TCS or TCI

Face: Tapering twice-daily use of mild (class 6) TCSs or TCIs

Body: Tapering twice-daily use of midstrength (class 4) TSC

Seek an appointment with physician

Face: Limited time use of midstrength (class 4) TSC then revert back to yellow

Body: Limited time use of super-potent (class 1) TSC then revert back to yellow

TCI, Topical calcineurin inhibitors; TCS, topical corticosteroids.

**GRAZIE
PER L'ATTENZIONE !**



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Topical corticosteroid phobia in parents of pediatric patients with atopic dermatitis: a multicentre survey

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Orsola Ametrano², C
Simona Giancristofa

Ital.J.Pediatrics 2017

Orlando¹,
Oriana Simonetti²

Corticofobia Timori

If the doctor prescribed TCS then I would apply the prescription

**Aspetto il più possibile prima dell'uso
Sospendo il trattamento appena posso**

Category	I completely disagree	I don't really agree	I agree to a certain extent	I completely agree
C	31 (12%)	67 (26%)	53 (20%)	109 (42%)
	72 (27%)	70 (27%)	64 (24%)	56 (21%)
	34 (13%)	51 (19%)	87 (33%)	90 (34%)

Table 4. Adverse effects of CS use of most concern to parents.

Correlations among steroid fear, acceptability, usage frequency, quality of life and disease severity in childhood eczema

Kam Lun Hon¹, Yin Ching K. Tsang¹, Nga Hin Pong¹, David C. K. Luk², Vivian W. Lee³, Wing Man Woo⁴, Chak Yiu Justin Lam⁴, Yun Ting Eunice Yeung⁴, Yiu Shing Sunny Chau⁴, Ka Kam Kenneth Chui¹, Ka Hin Gabriel Li⁴, and Ting Fan Leung¹

Journal of
Dermatological
Treatment **2016**

	Mild eczema (n = 50) (%)	Moderate/severe eczema (n = 111) (%)	p Value
Skin thinning	24 (48.0)	65 (58.6)	0.212
Other skin problems	5 (10.0)	21 (18.9)	0.155
Growth	7 (14.0)	19 (17.1)	0.619
Liver kidney	2 (4.0)	6 (5.4)	>0.999 ^a
Immune	1 (2.0)	1 (0.9)	0.526 ^a
CS resistance	2 (4.0)	3 (2.7)	0.646 ^a
CS dependence	5 (10.0)	7 (6.3)	0.518 ^a
Body hair	2 (4.0)	4 (3.6)	>0.999 ^a
Eye problem	1 (2.0)	8 (7.2)	0.276 ^a
Bone problem	4 (8.0)	17 (15.3)	0.202
Miscellaneous	4 (8.0)	10 (9.0)	>0.999 ^a
Don't know	13 (26.0)	9 (8.1)	0.002

^aFisher's exact test.

Bold values represent statistical significance.

Factors contributing to poor treatment outcomes in childhood atopic dermatitis

Anna Sokolova¹ and Saxon D Smith^{2,3}

Australasian Journal of

Dermatology

2015

Improving treatment adherence

Optimisation of the patient/caregiver-clinician relationship

Grade of recommendation: B (level 2b evidence)

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Grade of recommendation: B (level 2b evidence)

Other education adjuncts

Grade of recommendation: C (level 4 evidence)

Targeted education regarding TCS

Grade of recommendation: B (level 2b evidence)

Early and frequent follow up

Grade of recommendation: B (level 2b evidence)

Improving quality of life



Topical corticosteroid concerns from the clinicians' perspective

2017



Simon M. Mueller, Dominique Tomaschett, Deborah R. Vogt, Pe
Antonio Cozzio & Christian Surber

Corticofobia Influenza

ABSTRACT

Purpose: Topical corticosteroids concerns (TCC) are common in dermatology patients, possibly leading to non-adherence to topical corticosteroids (TCS) and poor disease control. Clinicians play a key role in that context, as they can reduce or reinforce these concerns. It is unknown, if clinicians have accurate knowledge of TCC to appropriately address this issue and whether they have concerns themselves to use TCS. This questionnaire-based study aimed to assess these two aspects.

Materials and methods: Accuracy of knowledge was defined by how close the clinicians' estimates were to reference values of our previous study, in which we had examined TCC in dermatology outpatients. Moreover, clinicians indicated whether they have concerns themselves to use TCS.

Results: Totally 202 clinicians participated. They underestimated both the prevalence of TCC and the resulting non-adherence. Whereas most clinicians correctly estimated characteristics of patients with TCC and the impact of patient information, only 31% of clinicians knew that skin atrophy was the leading concern, and only 30% correctly ranked the reasons for TCC. 74% of the clinicians had at least minor concerns themselves.

Conclusion: The majority of clinicians may have inaccurate knowledge of certain aspects of TCC and own concerns to use TCS.

Topical corticosteroid concerns from the clinicians' perspective

2017



Simon M. Mueller, Dominique Tomaschett, Deborah R. Vogt, Peter Itin, Antonio Cozzio & Christian Surber

Corticofobia

Table 1. Characteristics of patients with TCC, their most common and the ranking of sources of TCC as observed in the previous study (2nd column) mated by the clinicians (3rd column).

Characteristics related to TCC to be estimated by the clinicians	References from previous study [7]; Percentage of patients with TCC	Correct/total answers; Percentage of clinicians with correct answers
Age?	<60 years; 66%	173/177; 97.7%
Gender?	Female; 58%	187/194; 96.4%
Level of education?	Intermediate or high level of education; 91%	180/187; 96.3%
CAM use increased?	Yes; 39.4% compared to 21% CAM use in patients without TCC; $p < .01$	191/201; 95%
Most common concern?	Skin atrophy; 56%	68/173; 31%
Ranking of sources of concerns?	1. Others made "bad experience with TCS" 2. Negative reports by media (internet, press, television, radio) 3. Patients themselves made "bad experience" with TCS for any reason	57/190; 30%

CAM: complementary and alternative medicine.

Topical corticosteroid phobia in atopic dermatitis: International feasibility study of the TOPICOP score

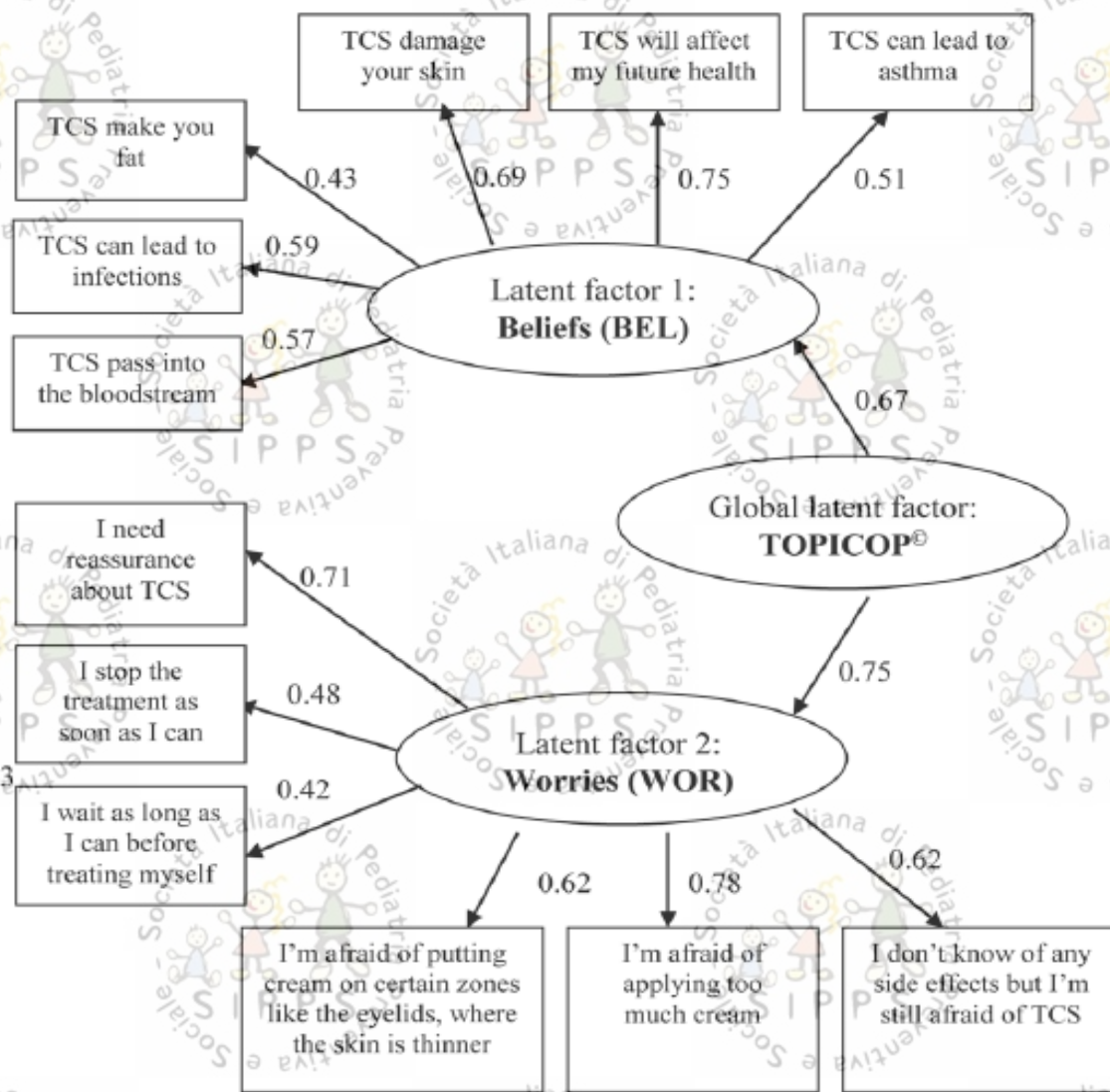
Allergy

EUROPEAN JOURNAL OF ALLERGY
AND CLINICAL IMMUNOLOGY
EASAC

2017

J.-F. Stalder¹ | H. Aubert¹ | E. Anthoine² | M. Futamura⁴ | D. Marcoux⁵ |

Corticofobia
Score validato: TOPICOP



Topical corticosteroid phobia in atopic dermatitis: International feasibility study of the TOPICOP score

Corticofobia Scala di valutazione

J.-F. Stalder¹ | H. Aubert¹ | E. Anthoine² | M. Futamura⁴ | D. Marcoux⁵ |

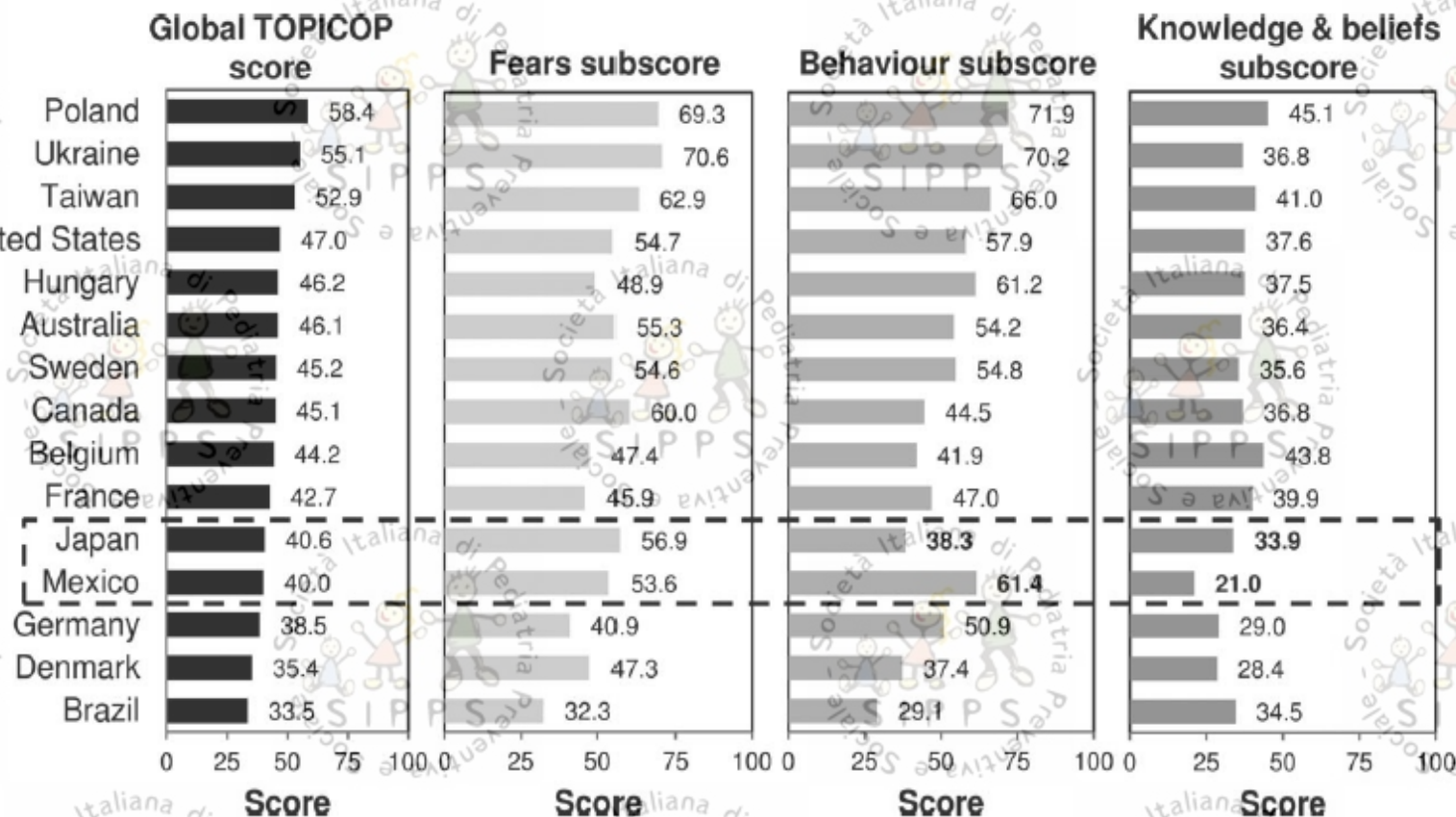


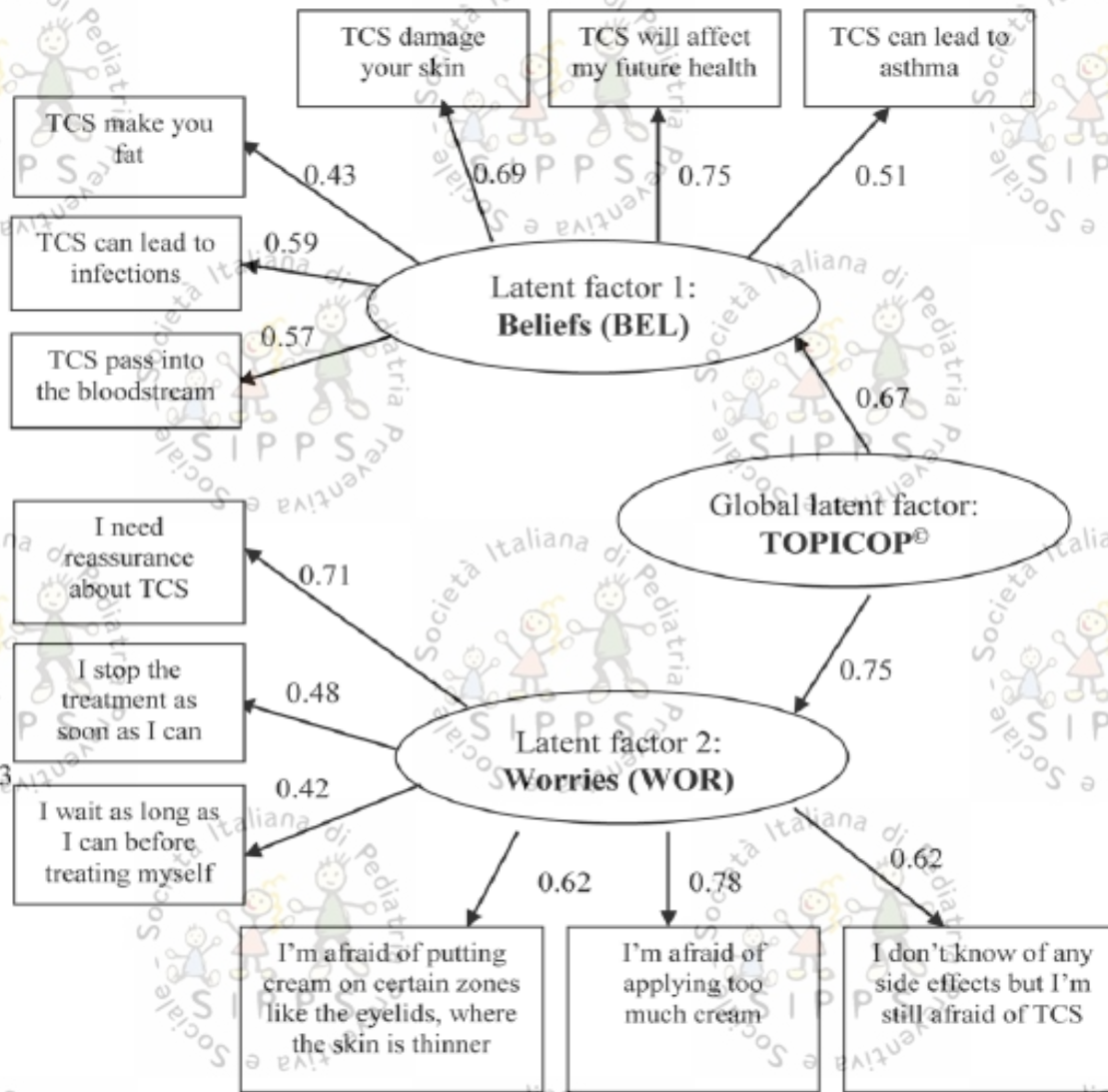
FIGURE 2 TOPICOP scores and subscores by country. Participants completed the 12 items in the TOPICOP questionnaire (see Table 2) on a 4-point Likert scale. Depending on the item, the scale was from never to always (0=never, 1=sometimes, 2=often, 3=always) or from totally disagree to totally agree (0=totally disagree, 1=do not really agree, 2=almost agree, 3=totally agree). TOPICOP scores and subscores ranged from 0% (no concern/fear) to 100% (maximum concern/fear). The dashed box highlights the findings from Japan and Mexico, which had similar global TOPICOP scores and fears subscores but, as highlighted by the numbers in bold, substantially different behaviour and knowledge and beliefs subscores

TOPICOP©: A New Scale Evaluating Topical Corticosteroid Phobia among Atopic Dermatitis Outpatients and Their Parents

2013

Conclusions: TOPICOP© is the first scale aimed at assessing topical corticophobia in adult patients and parents of children with eczema. TOPICOP© has excellent psychometric properties and should be easy to use in everyday clinical practice for clinicians and researchers. Further studies are needed to confirm our results and validate TOPICOP© in other cultures.

Corticofobia Scala di valutazione



Topical corticosteroid concerns from the clinicians' perspective

2017

Simon M. Mueller, Dominique Tomaschett, Deborah R. Vogt, Peter Itin, Antonio Cozzio & Christian Surber



Corticofobia Provenienza

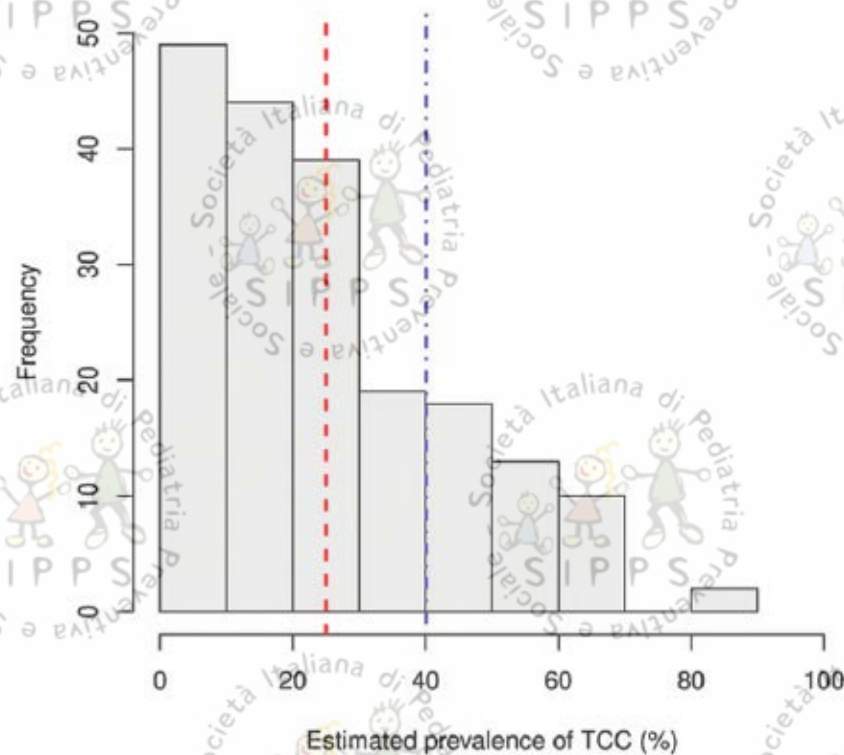


Figure 1. Estimated prevalence of topical corticosteroid concerns (TCC). The left line indicates the median of the prevalence as estimated by the clinicians (25%), the right line the observed prevalence in our previous study (40%).

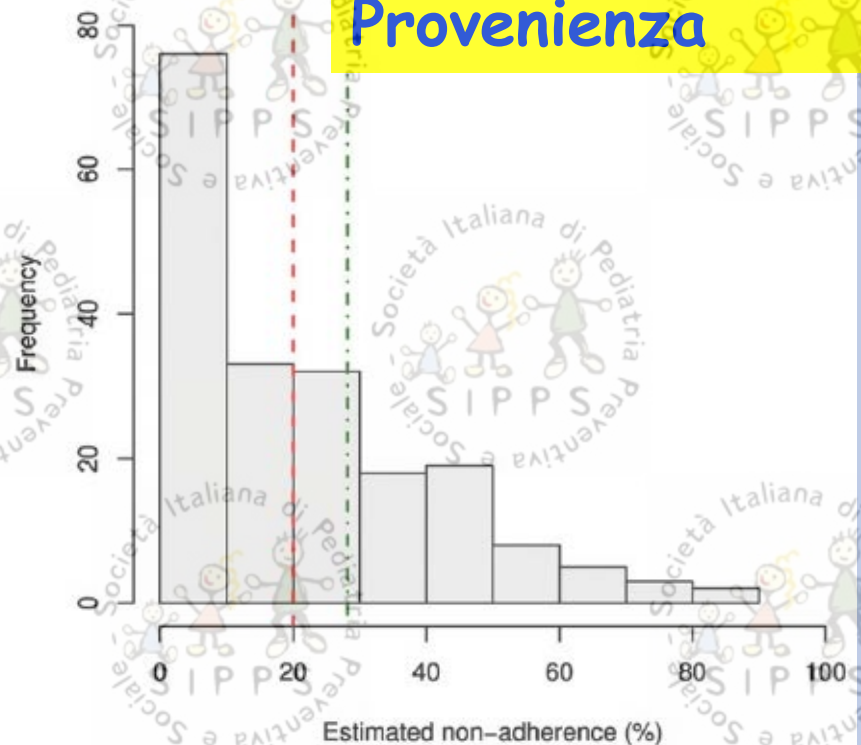








Figure 2. Estimated non-adherence to TCS resulting from TCC. The left line indicates the median of the non-adherence as estimated by the clinicians (20%), the right line the observed non-adherence in patients from our previous study (28%).

ORIGINAL ARTICLE

Evaluation of the influence of pharmacists and GPs on patient perceptions of long-term topical corticosteroid use

Lisa L. Farrugia^a , Andrew Lee^{a,b} , Gayle Fischer^{a,b,c} , Alex Blaszczyński^d , Stephen R. Carter^e  and Saxon D. Smith^{a,b,f} 

ABSTRACT

Purpose: To assess pharmacist and general practitioner (GP) advice and behaviors, as related to and reported by patients and parents of patients using topical corticosteroids (TCS) on a long-term basis.

Materials and methods: Multicenter cross-sectional survey of patients (aged 18+) and parents of pediatric patients (aged <18) with a history of long-term (≥ 1 month) TCS use, assessing: TCS treatment adherence and reasons for non-adherence; beliefs regarding TCS use and safety; messages regarding TCS received from community pharmacists, GPs, family/friends and the Internet; and experiences of GP and pharmacist counseling regarding TCS use.

Results: A total of 123 patients and 78 parents completed the survey ($n = 201$). 76.6% of respondents reported consistently ("Often" or "Always") receiving one or more message(s) regarding TCS "risk" from a GP and/or pharmacist ($n = 192$). Respondents reported being told to "try natural or complementary and alternative therapies before resorting to the use of TCS" significantly more often by pharmacists than by GPs ($p = 0.039$).

Conclusions: High rates of consistently delivered messages about TCS "risk" from GPs and pharmacists affect patient/parent understanding about TCS safety and may lead to treatment non-adherence. This indicates a need for reeducation of these groups on the safety of TCS use.

Evaluation of the influence of family and friends, and the Internet on patient perceptions of long-term topical corticosteroid use

2018

Saxon D Smith MBChB MHL FACD, Lisa L Farrugia BS, Victoria Harris MBBS LLB, Andrew Lee MBBS MMed, Alex Blaszczyński PhD & Gayle Fischer MBBS (Hons) MD FACD

Journal of
Dermatological
Treatment

Corticofobia Provenienza

Risk messages received from Friends/Family and the Internet

Statement	Friends/Family				Internet				Respondents for both questions, p-value
	'Never' or 'Rarely', n (%)	'Sometimes', n (%)	'Often' or 'Always', n (%)	Missing, n	'Never' or 'Rarely', n (%)	'Sometimes', n (%)	'Often' or 'Always', n (%)	Missing, n	
TCS causano atrofia	44 (46.8%)	46 (28.2%)	38	78 (51.6%)	32 (21.2%)	41 (27.1%)	50	n=147 p=0.370	
'Try non-prescription creams/ointments before resorting to the use of prescription TCS'	73 (46.8%)	42 (26.9%)	41 (26.3%)	45	85 (60.3%)	29 (20.6%)	27 (19.2%)	60	n=140 p=0.014*
'Try natural or complementary and alternative therapies before resorting to the use of TCS'	78 (51.3%)	30 (14.9%)	44 (29.0%)	49	79 (56.8%)	31 (22.3%)	29 (20.9%)	62	n=136 p=0.137
'Apply TCS "sparingly" or "thinly"'	70 (48.7%)	24 (16.7%)	50 (34.8%)	57	71 (51.8%)	21 (15.3%)	45 (32.8%)	64	n=134 p=0.555
'TCS cannot be used long-term'	73 (49.4%)	28 (18.9%)	47 (31.8%)	53	68 (50.0%)	27 (19.9%)	41 (30.1%)	65	n=134 p=0.708
'TCS may make my [child's] immune system less effective'	111 (76.5%)	19 (13.1%)	15 (10.4%)	56	107 (53.3%)	15 (11.0%)	14 (10.3%)	65	n=135 p=0.808

Correlations among steroid fear, acceptability, usage frequency, quality of life and disease severity in childhood eczema

2016

Kam Lun Hon¹, Yin Ching K. Tsang¹, Nga Hin Pong¹, David C. K. Luk², Vivian W. Lee³, Wing Man Woo⁴, Chak Yiu Justin Lam⁴, Yun Ting Eunice Yeung⁴, Yiu Shing Sunny Chau⁴, Ka Kam Kenneth Chui⁴, Ka Hin Gabriel Li⁴, and Ting Fan Leung¹

Journal of
Dermatological
Treatment

Table 3. Nature of fears about CS use in parents.

	Mild eczema (n = 50) (%)	Moderate/Severe eczema (n = 109) (%)	p Value
Interpersonal	37 (74.0)	70 (64.2)	0.222
Iatrogenic	11 (22.0)	30 (27.5)	0.460
Bibliophilic	15 (30.0)	39 (35.8)	0.475

Table 4. Adverse effects of CS use of most concern to parents.

	Mild eczema (n = 50) (%)	Moderate/severe eczema (n = 111) (%)	p Value
Skin thinning	24 (48.0)	65 (58.6)	0.212
Other skin problems	5 (10.0)	21 (18.9)	0.155
Growth	7 (14.0)	19 (17.1)	0.619
Liver kidney	2 (4.0)	6 (5.4)	>0.999 ^a
Immune	1 (2.0)	1 (0.9)	0.526 ^a
CS resistance	2 (4.0)	3 (2.7)	0.646 ^a
CS dependence	5 (10.0)	7 (6.3)	0.518 ^a
Body hair	2 (4.0)	4 (3.6)	>0.999 ^a
Eye problem	1 (2.0)	8 (7.2)	0.276 ^a
Bone problem	4 (8.0)	17 (15.3)	0.202
Miscellaneous	4 (8.0)	10 (9.0)	>0.999 ^a
Don't know	13 (26.0)	9 (8.1)	0.002

^aFisher's exact test.

Bold values represent statistical significance.

Corticofobia
Timori

Evaluation of the influence of pharmacists and GPs on patient perceptions of long-term topical corticosteroid use

Corticofobia Provenienza

Lisa L. Farrugia^a, Andrew Lee^{a,b}, Gayle Fischer^{a,b,c}, Alex Blaszczyński^d, Stephen R. Carter^e and Saxon D. Smith^{a,b,f}

Table 3. Patient beliefs.

Question stem: "For each of the following statements, please place a tick in the circle under the level of agreement that best reflects your current opinion of using TCS [on your child]."

Category (not indicated on survey)	Statement	"Strongly Disagree" or "Disagree", n (%)	"Neutral", n (%)	"Agree" or "Strongly Agree", n (%)	Missing, n
Necessity	"My life would be more difficult without topical corticosteroids for my [child's] skin condition"	20 (10.3%)	39 (20.1%)	135 (69.6%)	7
	"The health of my [child's] inflamed skin, at present, depends on using TCS"	30 (15.2%)	24 (12.2%)	143 (72.6%)	4
	"In the future, the health of my [child's] inflamed skin will depend on using TCS"	30 (15.4%)	50 (25.6%)	115 (59.0%)	6
	"Without TCS, my [child's] inflamed skin would be worse"	15 (7.7%)	19 (9.7%)	161 (82.6%)	6
	"TCS keep my [child's] inflamed skin condition under control"	15 (7.6%)	32 (16.2%)	150 (76.1%)	4
	"I worry that TCS cause changes in my [child's] skin color"	97 (49.5%)	60 (30.6%)	39 (19.9%)	5
	"I worry that TCS make my [child's] immune system less effective"	78 (40.2%)	76 (39.2%)	40 (20.6%)	7
	"I worry that TCS cause unwanted hair growth [on my child]"	123 (63.4%)	51 (26.3%)	20 (10.3%)	7
	"I worry about [my child] becoming too dependent on TCS"	72 (36.7%)	53 (27.0%)	71 (36.2%)	5
	"I worry that TCS thin my [child's] skin"	55 (27.8%)	56 (28.3%)	87 (43.9%)	3
	"I worry about the immediate effects of TCS [on my child]"	77 (39.3%)	60 (30.6%)	59 (30.1%)	5
	"I worry about the long-term effects of TCS [on my child]"	48 (24.2%)	35 (17.7%)	115 (58.1%)	3
	"Using TCS [on my child] is disruptive to my life"	127 (65.1%)	36 (18.5%)	32 (16.4%)	6
Concern	"I worry that TCS may reduce my child's growth" (Pediatric question only)	38 (51.4%)	24 (32.4%)	12 (16.2%)	4
	"I am capable of following the doctor's instructions to apply TCS"	6 (3.0%)	15 (7.6%)	176 (89.3%)	4
	"I am confident that I can follow the directions of the doctor in using TCS"	4 (2.0%)	14 (7.1%)	179 (90.9%)	4
	"Following the doctor's instructions to use TCS is easy"	10 (5.1%)	18 (9.1%)	170 (85.9%)	3
Information sources	"Pharmacists instruct me to apply the TCS exactly as directed by my doctor"	48 (24.7%)	59 (30.4%)	87 (44.8%)	7
	"I feel more confident following the advice of a pharmacist than a GP"	126 (64.3%)	53 (27.0%)	17 (8.7%)	5
	"I feel more confident following the advice of a pharmacist than a dermatologist"	162 (82.7%)	28 (14.3%)	6 (3.1%)	5
	"If a pharmacist gave me different advice to a doctor, I would follow the pharmacist's advice in preference to the doctor"	159 (81.1%)	27 (13.8%)	10 (5.1%)	5

Evaluation of the influence of family and friends, and the Internet on patient perceptions of long-term topical corticosteroid use

Journal of
Dermatological
Treatment

2018

Corticofobia Provenienza

Saxon D Smith MBChB MHL FADC, Lisa L Farrugia BS, Victoria Harris MBBS LLB, Andrew Lee MBBS MMed, Alex Blaszczyński PhD & Gayle Fischer MBBS (Hons) MD FADC

Benefit messages received from Friends/Family and the Internet,

Statement	Friends/Family				Internet				Respondents for both questions, p-value
	'Never' or 'Rarely', n (%)	'Sometimes', n (%)	'Often' or 'Always', n (%)	Missing, n	'Never' or 'Rarely', n (%)	'Sometimes', n (%)	'Often' or 'Always', n (%)	Missing, n	
'[Having] my [child's] skin condition means that I [he/she] will need to use TCS'	90 (65.7%)	26 (19.0%)	21 (15.3%)	64	68 (50.7%)	30 (22.4%)	36 (26.8%)	67	n=129 p<0.001*
'Inflamed skin conditions will improve with TCS'	68 (50.0%)	31 (22.8%)	37 (27.2%)	65	54 (40.9%)	30 (22.7%)	48 (36.4%)	69	n=128 p=0.007*
'Using TCS is good for inflamed skin'	77 (55.8%)	29 (21.0%)	32 (23.2%)	63	72 (55.4%)	31 (23.8%)	27 (20.8%)	71	n=130 p=0.966
'TCS will control my [child's] symptoms, but they will not provide a permanent cure. Because of this, I [my child] need[s] to continue using TCS whenever necessary.'	86 (62.4%)	21 (15.2%)	31 (22.5%)	63	83 (61.5%)	20 (14.8%)	32 (23.7%)	66	n=132 p=0.629

Pos *Il beneficio dei CST supera ampiamente il rischio legato agli effetti collaterali se i CST sono correttamente applicati.*

- Soppressione asse ipofisi-surrene (*molto raro*)
- Corticosteroide dipendenza (*raro in pediatria*)
 - Sindrome di Cushing
 - Ipertensione arteriosa
 - Diabete mellito
 - Osteoporosi

Si consiglia una valutazione clinica periodica solo se si usano steroidi potenti /molto e per lunga durata.

- Raccomandazione B Evidenza III
(reazioni topiche)
- Raccomandazione C Evidenza III
(reazioni sistemiche)

Factors contributing to poor treatment outcomes in childhood atopic dermatitis

Australasian Journal of

Dermatology

2015

Anna Sokolova¹ and Saxon D Smith^{2,3}

Grade of recommendation: D (level 5 evidence)

Future research

more research is needed. Educational interventions can now be studied more rigorously with the publication of standardised guidelines for TPE in AD. While the regularity of follow up is important, further research into the exact frequency and mode of follow up is warranted. The caregiver burden may be improved and the perceived complexity of treatment strategies can be rendered less daunting with the development of new vehicles that reflect

patient/caregiver preferences. It is also essential to define the sources and impact of misinformation on the use and safety of TCS to better support the patient/caregiver and improve treatment adherence.

CONCLUSION

It is evident that only a minority of patients and parents of children with chronic inflammatory skin diseases consistently receive benefit messaging from family/friends and the Internet whilst concurrently receiving misinformative risk messages from these influential sources. The varied and mixed nature of this messaging can help contribute to confusion and poor understanding about the safety and efficacy of TCS in chronic inflammatory dermatoses. This in turn can lead to treatment non-concordance and poorer treatment outcomes.



Adverse effects of topical glucocorticosteroids

Regional Variation in the Percutaneous Penetration of Hydrocortisone in Man

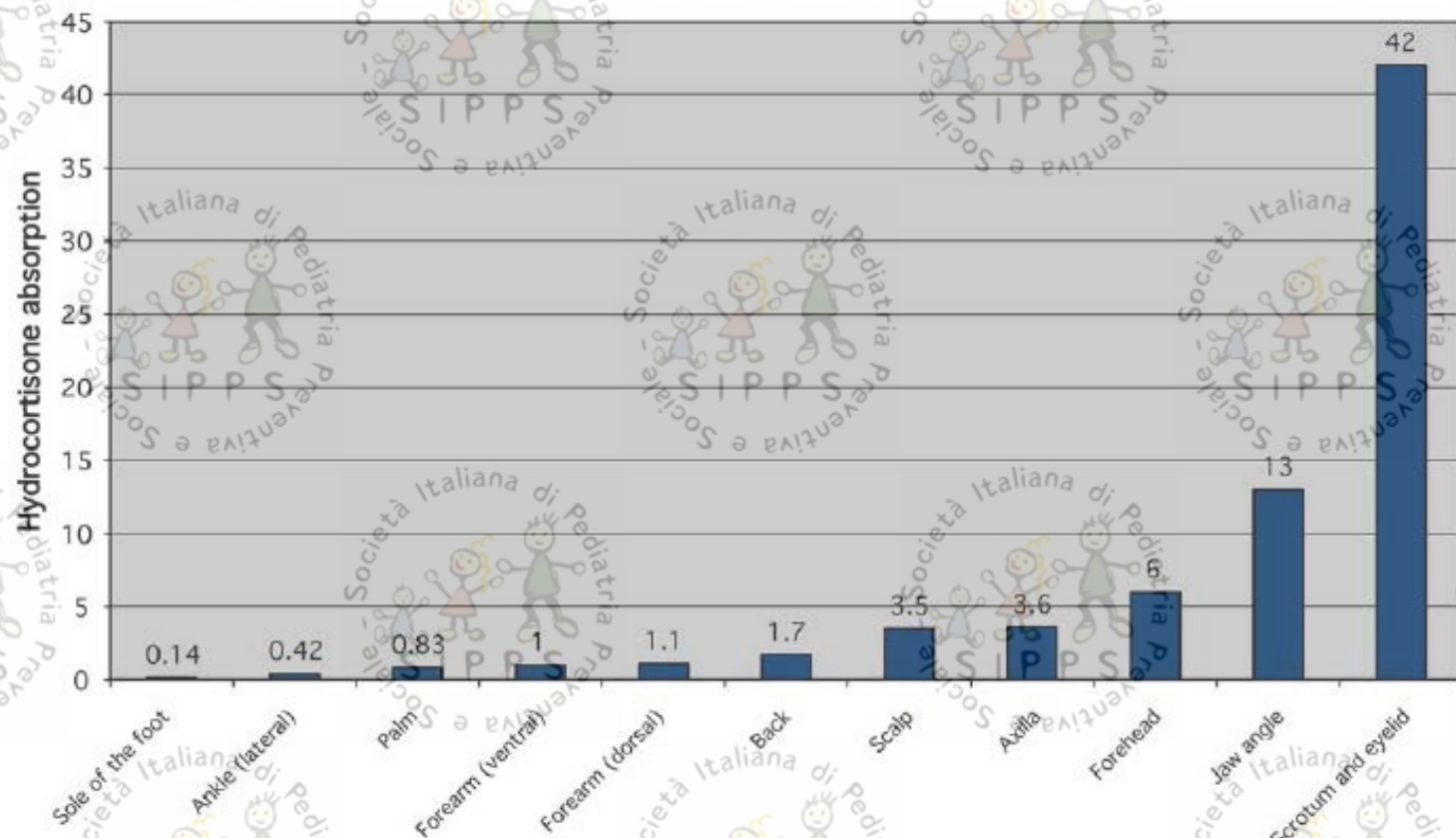


Fig 1. Regional variation in percutaneous penetration of hydrocortisone in human beings, according to Feldmann and Maibach⁵ and Wester and Maibach.⁶

CS fear

QoL (CDLQI)

Severity (NESS)

CS Usage frequency

 $r = -0.24, p = 0.02$

TCHM-ever

 $r = -0.18, p=0.042$ $r = -0.20, p = 0.01$ $r = -0.25, p = 0.001$

CS Acceptability (GAT)

$r = 0.17, p=0.029$

 $r = 0.57, p < 0.001$ $r = 0.27, p = 0.001$

Figure 1. Significant correlations among clinical factors in eczema patients.

Factors contributing to poor treatment outcomes in childhood atopic dermatitis

Anna Sokolova¹ and Saxon D Smith^{2,3}

Australasian Journal of
Dermatology

Factors contributing to poor treatment outcomes

Complexity of treatment regimens

Lack of knowledge

Impaired quality of life

Patient dissatisfaction

Frequency of follow up

Corticosteroid phobia

Use of complementary and alternative medicine



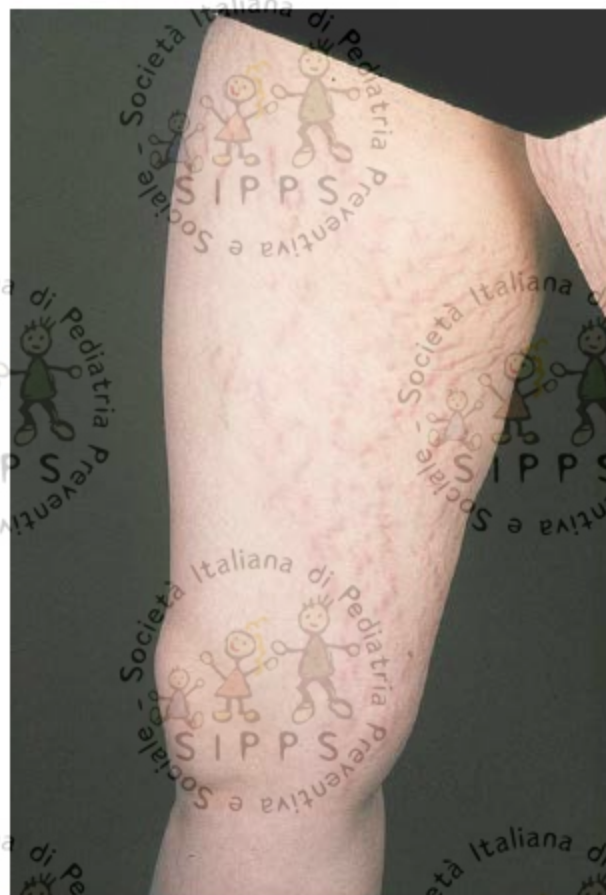
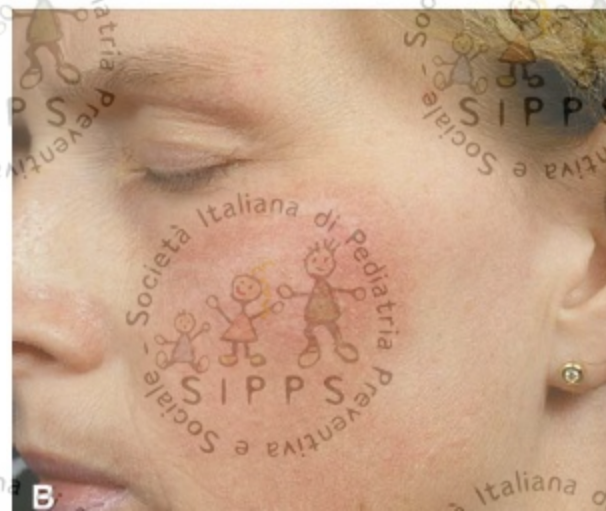


Fig 3. Striae distensae rubrae as a sign of topical corticosteroid abuse on the right thigh in a nonobese 27-year-old man.



A

Fig 4. **A,** Long-term inadvertent use of corticosteroids for treatment of perioral and cheek dermatitis. **B,** Closer view of the left cheek showing atrophic skin and white scarring, along with telangiectases after uncontrolled use of high-potency steroids for 9 months.



B



Fig 5. Steroid acne on the face characterized by pustules, erythema, and several open and closed comedones on the forehead. Free margins around the vermilion border are apparent.

they become more resistant upon recurrence,



Fig 6. Steroid abuse in a patient with atopic dermatitis showing generalized facial erythema, patchy hyperpigmentation on the forehead, increased atrophy, and wrinkles around the eyes. This patient has continued treatment with stronger derivatives because of loss of effect (tachyphylaxis).

La paura principale del 50% dei pazienti è legata alla possibilità di atrofia cutanea ed altri effetti locali ma spesso non c'è una vera motivazione ma solo pregiudizi e scarsa conoscenza.

multicentre survey

2016

**CORTICOFOBIA =
MANCATA ADERENZA = DIMINUITA EFFICACIA TERAPEUTICA**

Country	Score
Ontario	55.1
Taiwan	59.0
France	70.8
Italy	70.2
Spain	58.8

involved in the management of AD. It is mandatory that caregivers dedicate time to inform parents about the safety of the new generation products, whose main advantage is a clearly improved risk/benefit ratio.

Score 0 25 50 75 100 0 25 50 75 100 0 25 50 75 100 0 25 50 75 100

Topical corticosteroids

Healthcare professionals should discuss the benefits and harms of treatment with topical corticosteroids with children with atopic eczema and their parents or carers, emphasising that the benefits outweigh possible harms when they are applied correctly.

Grazie

National Collaborating Centre for
Women's and Children's Health

Atopic eczema in children
management of atopic eczema in children
from birth up to the age of 12 years

Clinical Guideline
December 2007
Funded to produce guidelines for the NHS by NICE

topici.

I corticosteroidi topici possono essere assorbiti a livello sistemico attraverso la cute integra. Il livello di assorbimento percutaneo dei corticosteroidi topici è determinato da diversi fattori, compreso il veicolo e l'integrità della barriera cutanea. Occlusione, infiammazione e/o altri processi di malattie della cute possono anche aumentare l'assorbimento percutaneo.

C'è comunque da rilevare che gli effetti collaterali sistemici dei preparati corticosteroidi per uso topico sono estremamente improbabili per i bassi dosaggi impiegati; la loro comparsa, tuttavia, può essere favorita dalla terapia occlusiva o quando vengono trattate zone cutanee estese con dosi elevate o per periodi di tempo prolungati.

Si tratta, in questi casi, dei disturbi classici della corticoterapia, in forma lieve e reversibili.



Adverse events reported in long-term (≥ 12 weeks) pediatric trials of TCI and TCS listed by duration

							Cutaneous AEs ^{a,b} (%)				Systemic AEs ^{a,c} (%)				
Trial	Year	Tx	Duration (wks)	n	DAE (%)	Bacterial Infection	Viral Infection	Fungal Infection	Atrophy	Bacterial Infection	Viral Infection	RTI	GI	Lymphoma	
Tacrolimus N=1370 ^d (0.03% n=524; 0.1% n=846)	Paller [49]	2001	0.03%	12	117	•	0.4-5	•	•	3	•	•	•	•	
	Kubota [55]	2009		12	31	•	•	•	•	•	•	•	•	•	
	Hofman [50]	2006		28	133	•	0.8	•	•	•	•	•	•	•	
	Paller [51] / Breneman [52]	2008		42	68	•	•	•	•	•	•	•	•	•	
	Thaçi [53] / Thaçi [54]	2008		52	125	2	2	•	•	•	•	•	•	•	
	Mandelin [58]	2012		104	50	4	10	4-18	•	4-16	2	4-90	38	•	
	Paller [49]	2001	0.1%	12	118	3	•	0.4-3	•	1	•	•	•	•	
	Tan [56]	2004		24	82	2	6-13	2	1	•	•	•	•	•	
Pimecrolimus N=4455 ^e	Kang [57]	2001		52	255	4	•	0.4-8	•	•	35	•	•	•	
	Hanfin [59]	2005		196	391	1-3	•	0-9	•	7-16	44-47	12-20	•	•	
	Kaufmann [62] / Staab [63]	2004	1%	20	188	2	1	0.5	•	•	•	•	•	•	
	Ruer-Mulard [60]	2009		22	268	3-5	2	2-3	•	0.7-6	2	0.7-6	3-5	•	
	Zuberbier [47] / Zuberbier [48]	2007		24	195	•	1	0-1	•	•	•	•	•	•	
	Lübke [64]	2006		24	947	2	2	0.3-2	•	2-4	3	5-10	3	•	
	Simon [65]	2006		24	109	0.9	2	2-3	•	•	•	•	•	•	
	Siegfried [44]	2006		24	183	•	4	0	•	4	•	9-18	6-7	•	
Low-potency TCS N=400 ^f	Sigurðsson [45]	2008		26	256	0.4	4	2-4	•	3-5	2-7	4-6	4-5	•	
	Whalley [66] / Langley [67]	2002		26	335	1.5	4-5	•	•	0-6	5-7	3-21	•	•	
	Kapp [41]	2002		52	204	•	0-9	0-20	•	15-22	•	15-27	15-28	•	
	Wahn [46]	2002		52	474	•	0.2-8	0-3	•	13	15	•	•	•	
	Papp [68] / Papp [69]	2005		104	91	0.6	1-9	3-8	3	8-16	•	8	9-20	•	
	Sigurðsson [61]	2015		260	1205	1	1-2	3-25	•	11-17	6-17	4-25	22-32	•	
	Kirkup [73]	2003	FTC	16	136	0.7	0-0.7	•	0.7	•	4	6	•	•	•
	Thomas [70]	2002	HYD	18	104	•	•	•	8	•	•	•	•	•	•
Mid-potency TCS N=257	Jorizzo [71]	1995	DES	25	16	•	•	•	0	•	•	•	•	•	
	Jorizzo [71]	1995	HYD	25	20	•	•	•	0	•	•	•	•	•	
	Hofman [50]	2006	HYD	28	124	•	2	•	0	•	•	•	•	•	
Low- or mid-potency TCS N=1342 ^{g,h}	Thomas [70]	2002	BMV	18	103	•	•	•	12	•	1	•	•	•	
	Hanfin [72]	2002	FTC	44	154	•	•	•	0	•	•	•	•	•	
VEH+TCS/rescue N=729 ⁱ	Kirkup [73]	2003	HYD	16	129	3	0-2	•	0	•	3-4	4	•	•	
	Sigurðsson [61]	2015	HYD	260	1213	1	10	4-23	•	11-17	7-17	5-32	21-31	0	
	Siegfried [44]	2006	VEH	24	92	•	5	0	•	•	8	•	3-17	2-8	•
VEH N=355 ^j	Zuberbier [48] / Zuberbier [47]	2007	VEH	24	89	•	1	0-1	•	•	•	•	•	•	
	Sigurðsson [45]	2008	VEH	26	265	2	2	3	•	0.8-6	4-6	4-7	2-4	•	
	Kapp [41]	2002	VEH	52	46	•	0-7	0-16	•	16-21	•	16-25	8-26	•	
	Wahn [46]	2002	VEH	52	237	•	0-27	0-3	•	14	10	•	•	•	
No treatment N=50 ^k	Paller [49]	2001	VEH	12	116	8	•	0-1	•	8	•	•	•	•	
	Paller [52] / Breneman [51]	2008	VEH	42	36	•	•	3	•	•	•	•	•	•	
	Hanfin [72]	2002	VEH	44	77	•	•	•	•	•	•	•	•	•	
	Thaçi [54] / Thaçi [53]	2008	VEH	52	125	•	2-3	3-4	•	•	•	•	•	•	

ECZEMA 2017: HIGHLIGHTS



- Complex polygenic disorder
- Chronic inflammatory skin disease

- Eczema cannot be cured at present
- The aim of management is to improve symptoms and achieve long-term disease control with a multistep approach
- Nonadherence rates are high

La corticofobia



1. Perché utilizzarli ?
(Meccanismo d'azione)
2. Quando e come utilizzarli
3. Reazioni avverse e corticofobia





Consensus Conference on Clinical Management of pediatric Atopic Dermatitis

Elena Galli^{1*}, Iria Neri², Giampaolo Ricci³, Ermanno Baldo⁴, Maurizio Barone⁵, Anna Belloni Fortina⁶, Roberto Bernardini⁷, Irene Beti⁸, Carlo Caffarelli⁹, Elisabetta Calamelli¹⁰, Lucetta Capra¹⁰, Rossella Carella¹¹, Francesca Cipriani¹¹, Pasquale Comberiati¹¹, Andrea Diociaiuti¹², Maya El Hachem¹², Elena Fontana¹³, Michaela Gruber¹⁴, Ellen Haddcock¹⁵, Nunzia Maiello¹⁵, Paolo Meglio¹⁶, Annalisa Patrizi¹⁷, Diego Perotti¹⁸, Dorella Scapone¹⁹, Ingrid Wladhuter¹² and Lawrence F. Eichenfield¹⁴

Current guidelines for the evaluation and management of atopic dermatitis: A comparison of the Joint Task Force Practice Parameter and American Academy of Dermatology guidelines



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TOPICAL CORTICOSTEROIDS

TCS are used in the management of AD in both adults and children and are the mainstay of anti-inflammatory therapy.

Efficacy

TCS have been used to treat AD for more than 60 years. Their efficacy has been demonstrated with a wide variety of preparations and strengths, with

Raccomandazione A Livello di Evidenza I

topical anti-inflammatory therapies are compared.

ECZEMA 2018: HIGHLIGHTS



- Complex polygenic disorder

- Chronic inflammatory skin disease

- Pathophysiologic insights : Skin barrier dysfunction , role of innate immunity, impact of skin microbiome

- Epigenetic susceptibility to environmental factors

- More clinical and immunological phenotypes of eczema

- Prevalence:

{
-18.1% US
-16% Europe
-24.6% Japan

- Clinical management presents a real challenge
(no resolutive cure at present)

- Tremendously negative effect on the quality of life of patients and family

