

ORIGINAL ARTICLE

Corticosteroid phobia and other confounders in the treatment of childhood atopic dermatitis explored using parent focus groups

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ABSTRACT

Background/Objectives: Anxieties associated with corticosteroid treatment and preference for ‘safer natural therapy’ are common in parents of children with atopic dermatitis. We used focus groups to explore the source of these attitudes.

Methods: The study involved 16 parents. Parents expressed difficulties with living with and treating atopic dermatitis which were categorized into themes using qualitative data analysis software.

Results: Themes identified include: emotional impact of atopic dermatitis; difficulty in accepting ‘control’ verses ‘cure’; topical corticosteroid negative perceptions; anxiety and confusion with treatment; preference for ‘natural’ therapy; and attitude-changing positive experiences.

Conclusions: Our findings illustrate the emotional impact of atopic dermatitis and the frustration with the lack of potential cure. ‘Corticosteroid phobia’ was universal among parents in our cohort and is a fear generated by doctors, pharmacists, close acquaintances and information from the internet. Participants expressed high levels of parental guilt linked to a desire for an eradicable ‘cause’ for atopic dermatitis, despite intellectually understanding this is a genetically determined condition. Parents were willing to change attitudes with accurate information from perceived reliable sources, positive hospitalization experiences and a relationship with a trusted dermatologist. Parents’ suggestions to improve confidence

included the provision of readily available information and better access to doctor- and nurse-led paediatric dermatology services.

Key words: atopic dermatitis, fear, focus group, management, paediatric, phobia, topical corticosteroid.

INTRODUCTION

One of the major reasons for an unsatisfactory treatment outcome in the treatment of childhood atopic dermatitis is inadequate compliance.^{1–5} Previous studies have highlighted the fact that even though severe atopic dermatitis is disabling and disruptive for the patients and their families, adherence to topical treatment is poor and anxiety regarding the use of treatment is high.^{1,4–6} A number of studies have evaluated educational interventions to improve compliance. These include written and video-aided information, written action plans, nurse-led clinics and educational group sessions with parents.^{5,7–9}

Topical corticosteroids remain the mainstay of atopic dermatitis treatment. A major cause of anxiety and barrier to effective compliance is what has been termed ‘corticosteroid phobia’, a phenomenon that causes problems not only for dermatologists attempting to treat atopic dermatitis with topical corticosteroids, but also for paediatricians managing asthma with inhaled corticosteroids.^{10–12} Fear of topical corticosteroids appears to be strongly linked to a preference for what parents of patients frequently term ‘natural therapy’. Alternative and complementary medicines are commonly used by parents of children with atopic dermatitis.^{13,14}

A focus group is a qualitative research tool in which a group of up to 12 people are interviewed by a facilitator. Focus groups allow interviewers to study people in an interactive setting. They have high validity and have been widely used in the social sciences to obtain data and insights, sometimes unexpected, on topics of interest. Focus group

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theory has been used previously to study the psychological, physical and social impact of atopic dermatitis.¹⁵

The aim of our study was to use focus group theory to explore parental attitudes to the use of corticosteroids and the associated desire for natural therapy. Our hypothesis was that in a group situation, the parents of children with atopic dermatitis would voice their attitudes to both issues, and that they would emerge as major barriers to compliance. Our primary aim was to explore these phenomena in order to generate further hypotheses regarding how to manage them. Our secondary aim was to derive suggestions from the parents themselves about how health professionals might help them to become more confident in the use of effective management strategies in atopic dermatitis which would ensure good long-term control of their children's disease.

MATERIALS AND METHODS

A qualitative approach using focus group discussion was adapted in this study to gain in-depth views of parents about the use of topical corticosteroids to manage their children's atopic dermatitis.

The study protocol was reviewed and approved by the Health Research Ethics Committee of the Northern Sydney Central Coast Area Health at Royal North Shore Hospital. All participants were informed about the objectives of the study and written consent was obtained. The participants did not receive compensation for their time.

Study participants

The participants were recruited from parents of children with atopic dermatitis who required the regular use of topical corticosteroids and who regularly attended the paediatric dermatology clinic at Royal North Shore Hospital. The hospital has a catchment area predominately from the North Shore of Sydney and the Central Coast of New South Wales. Individuals were considered for participation if they were parents of children aged 0–18 years old who suffered from atopic dermatitis, as confirmed by a paediatric dermatologist, and who required the regular use of topical corticosteroids to manage their atopic dermatitis. Recruitment was not based on the severity of skin disease.

A total of 16 parents agreed to participate in the study and consent was obtained before the focus session. Parents who were unable to speak and read English were excluded.

Focus groups

Focus groups were conducted at the Dermatology Department within Royal North Shore Hospital between August 2008 and February 2009. Group discussions were conducted in English. The participants in the focus group included the parents and two facilitators: a dermatologist and a clinical psychologist. There were two observers.

Data saturation was reached after the second focus group was conducted. An additional focus group discussion was

carried out to ensure that no new data were identified. Thus, the study comprises three focus group discussions.

Before each group discussion, a brief questionnaire was administered to the participants to gather information regarding their demographic background (age, sex, relationship to child). Before the first focus group, the questionnaire was pilot-tested to ensure the wording was understandable and that the questions elicited the information sought. After the pilot test, any wording issues and ambiguities that had been detected were addressed, minor amendments were made, and the final version was consistently used across all focus groups. The items included in the pre-focus group questionnaire were scored using a 5-point scale (where 1 = strongly disagree, 2 = agree, 3 = neither agree nor disagree, 4 = agree and 5 = strongly agree) and are listed in Table 1.

The group discussion began with an introductory welcome before the facilitator-prompted discussion began with an open-ended question. The facilitator did not participate in the discussion. The open-ended questions used to generate discussions are listed in Table 2.

Discussions were conducted for between 1.5 and 2 h. These discussions were audiotaped and transcribed in a Word document. Notes were taken by the facilitator and the

Table 1 Pre-focus group questionnaire items

1. I believe that my child is not cooperative with treatment
2. I believe that treatment with creams is too time-consuming
3. I believe that treatment with creams is expensive
4. The word 'sparingly' on the label of cortisone creams worries me
5. I believe that cortisone creams are dangerous
6. I believe that cortisone creams cause thinning of the skin
7. I believe that cortisone creams may reduce my child's growth
8. I believe that cortisone creams may affect my child's immune system
9. I believe that cortisone creams should be reserved for treating only very severe eczema
10. I believe that cortisone cream is a waste of time because the eczema just comes back when I stop it
11. I believe that my child's problem is due to allergy
12. I believe that many treatments cause stinging and itching
13. I think it should be possible to cure eczema
14. I believe that cortisone creams are too dangerous to use on my child
15. I feel I have been adequately informed by my doctor about how to manage my child's eczema
16. I would prefer to use natural therapy to treat my child's eczema rather than cortisone cream
17. Information on the internet caused me to be more concerned about cortisone creams
18. I would be interested to take part in an educational support group on eczema treatment
19. Information from my friends with children caused me to become concerned about cortisone creams
20. Written instructions would help me to know what to do to help my child
21. I would find a video with instructions on applying wet dressings helpful
22. I found an admission to the hospital a positive experience
23. I was more positive about cortisone creams after admission to hospital

Table 2 Open-ended questions

What is it like to have a child with atopic dermatitis?
How do you feel about control versus cure?
What is your view on allergy?
Tell us about cortisone treatment?
Where did you get your information about eczema?
What about natural therapy?
How do you conceptualise 'thin skin'?
What were some of the problems you have encountered with treatment?
What are your concerns about treatment?
How do you feel about petroleum products?
What is a 'natural product'?
What can we do to help you?
What would give you the most confidence?
Tell us about positive experiences
Tell us about negative experiences

research team. These notes were used to supplement the audiotapes of the discussions. Consistent with grounded theory methods, focus groups were continued until data saturation was reached or no new information was uncovered.

Statistical analysis

QRS NVivo qualitative software (QRS International Pty Ltd, Doncaster, Victoria, Australia) was used for the data analyses. The transcripts were analysed by two of the investigators using open-, axial- and selective-coding procedures. The process of analysis first involved open coding, whereby data of specific themes and categories were identified. When specific themes were identified, more specific axial coding was used to develop axial nodes from the core categories. Subsequently, selective coding was used to integrate the core categories with other categories. The coding was carried out by a single independent coder, and the consistency of coding assessed by an inter-observer. In the final coding stage, the study's researchers integrated the selective codings with the core categories.

Themes identified were used to form a list of suggested strategies for dermatologists that might enable them to increase patient confidence in treatment.

RESULTS

Participants

A total of 16 parents attended three focus groups. All were parents of children with a skin condition requiring the use of a topical corticosteroid. All but one of the participants were female and aged between 34 and 49 years. All parents were from the catchment area of Northern Sydney and Central Coast area health service, which is a middle to high socio-economic-strata area. All participated equally and enthusiastically to the discussion.

Pre-focus group questionnaire

The demographic data collected are presented in Table 3 and disease-specific questions (such as age of diagnosis, the

Table 3 Data from questionnaire (*n* = 16)

Age range of parents	34–49 years
Mean age	40.2 years
Sex of parent	15 female, 1 male
Mean age of child at eczema onset	8.5 months
Cost of treatment per month:	
Less than \$10	2/16
\$11–20	2/16
\$21–30	4/16
More than \$30	7/16
Unsure	1/16
Respondents were told by the following people that topical corticosteroids are dangerous (%):	
Friends	14/16 (88)
Family	8/16 (50)
Pharmacist	7/16 (44)
General practitioner	4/16 (25)
Dermatologist	0/16 (0)
Frequency of medical follow up desired by parents:	
Monthly	2/16
3-monthly	2/16
6-monthly	7/16
12-monthly	1/16
As needed	4/16

use of topical corticosteroids, the cost per month of managing their child's atopic dermatitis, and the impact of atopic dermatitis on their child and family unit) are presented in Figure 1.

All parents (100%) reported they had been told by other people that topical corticosteroids were dangerous. Friends were the most common group of people who had given parents this information (88%). They had also been advised that topical corticosteroids were dangerous by family (50%), pharmacists (44%) and general practitioners (25%).

Most parents believed that topical corticosteroids were dangerous or were unsure. Skin thinning was the most prevalent cause for parents' concern as a perceived risk of using topical corticosteroids. While most parents did not believe that topical corticosteroids would interfere with their child's growth, they were unsure about its effect on the immune system. Only one parent disagreed that allergy was the cause of atopic dermatitis. Given the choice, the majority of parents indicated they would prefer to use 'natural' therapies over topical corticosteroids.

Most parents did not believe that treatment was too time-consuming, which suggests a general acknowledgement of the amount of parental effort required to treat children with a chronic skin disease. However, over half of parents thought that the cost of treatment was expensive. Most parents indicated a desire for regular scheduled visits with their doctor for their child's skin condition.

All but one of the parents had children who were admitted to hospital for treatment of their skin condition, and the majority found this to be a positive experience that alleviated their fears about topical corticosteroids. Most parents agreed that information about the treatment of childhood atopic dermatitis in the form of written or audiovisual material would be useful.

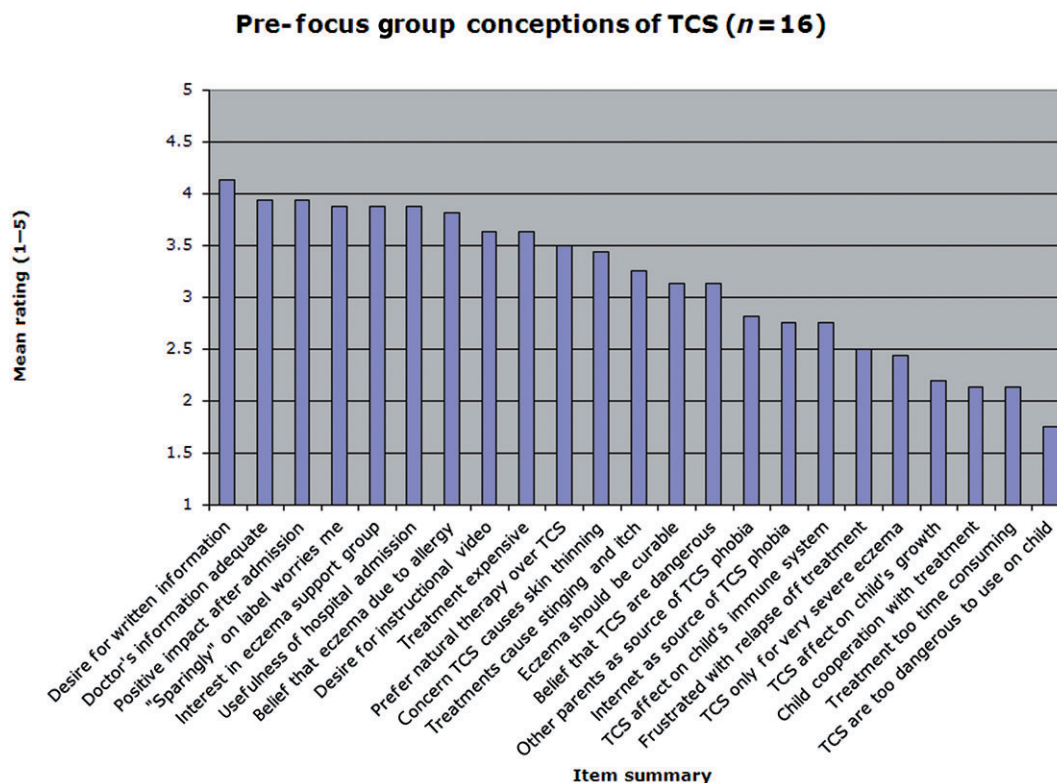


Figure 1 Mean rating of answers to disease specific questions in pre-focus group questionnaire. Items were scored on a visual analog scale where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

Focus group discussion

All statements made by parents were able to be categorized into seven broad themes (emotional impact, negative perceptions towards corticosteroids, sources of anxiety and confusion with treatment, complementary and alternative medicine, problems with accepting control not cure, supportive or positive experiences that changed attitudes and key parent-suggested improvements), which were thus considered to be key issues in atopic dermatitis management. Table 4 outlines these themes and the corresponding subthemes relating to examples of the parents' enunciated experiences.

DISCUSSION

In September 2009, a couple whose daughter died in Sydney, Australia as a result of sepsis secondary to severe, medically untreated atopic dermatitis, was convicted of criminal negligence in the New South Wales Supreme court and sentenced to jail. The father, a homoeopath, had treated the child himself.¹⁶ This unusual case illustrates the extreme end of a phenomenon which is becoming increasingly common behaviour in parents of children with atopic dermatitis: rejection of treatment that is recognized by dermatologists to be safe and effective in favour of complementary medicine^{15,14} and restricted diets that are based on a belief in allergy as the cause of atopic dermatitis.¹⁷

Treatment of atopic dermatitis with topical corticosteroids is accepted as the gold standard, with very few side-effects

if correctly used. The belief that medical treatment for atopic dermatitis with topical corticosteroids is dangerous and that 'natural' therapy is safe and therefore preferable is common among Australian parents. The majority of parents of a child with atopic dermatitis seen in our paediatric dermatology clinic express a fear of the use of topical corticosteroids. The commonest belief is that use of topical corticosteroids will thin the skin irreversibly; however, concerns about immune suppression and growth failure are also expressed by many parents. Much valuable time is wasted arguing the case for topical corticosteroid treatment in an attempt to persuade doubting parents that it is the safest and most effective treatment for their child. Even when children are severely affected by atopic dermatitis, many parents resist advice that involves the use of topical corticosteroids. Fear of medical treatment includes fear of the use of ointment-based moisturizers now characterized by some patients as 'toxic petrochemicals'.

Previous reports document 'corticosteroid phobia' as a major cause of non-compliance and treatment failure in atopic dermatitis.^{10-12,18} In fact, this term may be a misnomer. A phobia is an irrational fear. Parents have many reasons to be rationally frightened of topical corticosteroids because of warnings not only from friends, relatives and the internet, but also from traditionally trusted sources including their general practitioner and pharmacist.

The aim of our study was to explore the complex aetiology of the fear of topical corticosteroid treatment for atopic dermatitis. Our primary aim was to confirm the importance

Table 4 Results of focus group discussion

Analysis of the qualitative data revealed seven key themes:

Theme 1. Emotional impact associated with having a child with significant atopic dermatitis

Parents reported guilt and emotional distress associated with five sub-themes:

1. *Physical appearance*: a sense of discomfort/distress in response to intrusive comments or reactions by strangers to the physical appearance of the child.
2. *Stresses*: dealing with interruption to the child and parents' routine and daily obligations, their child's distress, and the effects of lack of sleep and exhaustion from attending to their child's needs at night.
3. *Strain on parent-child relationship*: interpersonal strain and frustrations associated with conflicts over the need to coerce their child to comply with treatment that causes pain/discomfort.
4. *Parental guilt and sense of helplessness*: feelings of inadequacy and failure in their inability to prevent the eczema, envy of other parents with perceived normal children, feeling judged by others as inadequate parents, and feeling a failure as a parent. One participant remarked that she felt shame in response to her belief that others viewed her child as a victim of child abuse.
5. *Anxiety related to future prospects*: fears and concerns for the child's future due to their condition, particularly social interactions with peers, self esteem and dealing with relationships.

Theme 2. Perception of cortisones: negative

A consistent theme of strong negative perceptions, anxiety and lack of clear information over the potential harmful effects and proper application/use of cortisones emerged:

1. *Concern over long-term negative effects*: parents expressed the belief that repeated cortisone use would result in skin atrophy ('Won't it thin their skin?'), and possible long-term harm from treatment, for example, leading to suppression of the immune system.
2. *Anxiety regarding appropriate use of steroids*: concerns that were generated by warning labels that cautioned users to 'Use sparingly'. This created the impression that cortisone should only be used when eczema is severe and contributed to the under-utilization of the cream.
3. *Belief that cortisone masks but does not treat the underlying cause of the condition*: failure to see the point of using a treatment considered simply a 'band-aid solution'. This belief is reinforced by cautionary comments offered from general practitioner that 'you should only use this strong cortisone for 3 days', pharmacist's cautioning parents to 'Be careful' and 'Do you realize this is cortisone?', and non-health professional third parties suggesting that 'everyone has a friend or relative that had terrible side effects from cortisone'. The implicit message is that cortisone does not cure and has side effects, and therefore parents should limit or avoid prolonged use.

Theme 3. Sources of anxiety and confusion in atopic dermatitis treatment

Qualitative data revealed that parents often had difficulty locating relevant and accurate information about the management of ectopic dermatitis and cortisone use.

1. *Access to accurate information*: participants consistently reported a lack of information from expected sources, particularly their general practitioner. As a consequence, parents felt the need to seek information for themselves from varying unreliable sources such as the Internet, or media discussing allergies and natural products. Participants indicated that they were not able to evaluate the accuracy of information obtained from these sources.
2. *Negative experiences with general practitioner/pharmacist*: participants indicated that they obtained insufficient information from general practitioners, received conflicting opinions from different sources causing confusion, had problems obtaining specialist referrals, and general practitioners tended to trivialize eczema and were unwilling to refer parents to specialists.
3. *Information gleaned from non-medical others*: strongly opinionated statements from teachers, family and friends insinuating that medical treatment is dangerous and unnecessary, and recommending alternative therapies.

Theme 4. Complementary and alternative medicine

Participants expressed several views regarding alternative therapies:

1. *Treatment sequence*: that medication is scientifically tested is not appreciated by participants is indicated by preferences to begin with 'natural' approaches before trying medication. Preferences for 'natural products' appear to be related to their beliefs in lower side effects and better safety profiles, and that moisturizers are 'toxic petrochemicals', a view perpetuated by the media. The promotion of natural therapy in the media and pressure from families and friends effectively influenced most participants to consult naturopaths in pursuit of natural remedies. Participants' apparent lack of knowledge as to what constitutes a 'natural therapy', combined with naturopathic claims of a cure, and the promotion of an allergy as the underlying cause are reinforcing factors. Cost and the realization that complementary 'natural' medicines do not work become deterrent factors in their continued use.

Theme 5. Problems accepting concept of control rather than cure

Participants reported experiencing difficulties accepting the notion that management is based on the concept of controlling the severity of the eczema rather than intervening to cure the condition:

1. *Control versus cure*: even when participants acknowledged that they understood the genetic basis of the condition, they reported that they found it difficult to let go of the notion that they may be able to find a 'cause' that can be eliminated: 'I will never stop searching'. As a consequence, recognizing the need for long-term management was described as a major factor wearing down participants. Participants indicated that there was a need to fully understand the rationale for cortisone before they considered they could accept this as standard treatment

Theme 6. Supportive or positive experiences that produced attitude change

Participants reported a number of significant positive factors that reduced their uncertainties and anxieties, and led to greater understanding and acceptance of cortisone treatment. These included:

1. *Positive experience and outcomes of hospital treatment*:
 - a. Evidence of rapid improvement in their child's condition.
 - b. Demonstration of the liberal application of cortisone and emollient by nurses.
 - c. Demonstration of the use of wet dressings.
 - d. Supportive experience with nursing staff.

These observations and experiences resulted in participants reporting that they benefitted from gaining insights and guidelines into the appropriate use of cortisone, resulting in an increased sense of control. Applying their newly learnt techniques and knowledge resulted in positive results and improved their confidence in using cortisone and their quality of life through improved sleep, concentration, and self-esteem, and the child's improved performance at school.

In addition, participants reported that the involvement of other specialists such as immunologists was seen as a positive step, with trust in their dermatologist a key factor improving compliance.

Theme 7. Key parent-suggested improvements

Participants were asked to express their views on possible changes to current practices and sources of information that they considered would enhance their knowledge and reduce anxieties related to their child's atopic dermatitis and use of cortisone. Emerging themes suggested improvements in doctor-patient communication, sources of information, and importantly, observation of nursing staff applying wet dressings:

1. *Doctor-patient communication*: participants suggested that doctors should be more cognizant of the challenges confronting anxious parents absorbing information during a consultation and stresses linked to:
 - a. Consultation time limits.
 - b. Children's attention spans.
2. *Information source*: participants indicated greater confidence in the quality information from perceived reliable source, such as a university or hospital department, presented through various forms of media: websites, information sheets and information/demonstration DVD.
3. *Access to services*: participants reported that improved and earlier access to paediatric dermatology services would increase their knowledge and reduce their anxieties. In particular, observing a dermatology nurse apply regular wet dressings in clinics was identified as a significant factor alleviating anxieties and improving the management of their child's atopic eczema.

of fear of topical corticosteroids in treatment failure, with the corollary of this being that the only viable alternative left to parents was 'complementary medicine and/or allergen avoidance', the latter often being advocated by natural therapists. We expected that if parents were allowed to discuss their experiences in a group session, this would emerge as a major concern. We also expected that group discussion would generate possible solutions for the problem.

The emotional impact of atopic dermatitis is well reported to be substantial.^{2,5,6,15,19} In addition to this, parents of children with atopic dermatitis do not have access to the level of support and public understanding experienced by parents of children with other chronic conditions such as diabetes.¹⁹ This theme emerged strongly, relating to the appearance of the child, sleep deprivation, social isolation and the stress of administering treatment, as well as conflict between parent and child over treatment. Our results are similar to those documented in a previous focus group study.¹⁵

There is a high degree of guilt experienced by parents, who voiced feelings of failure, inadequacy and sense that they could have somehow prevented the disease. We hypothesize that this is linked to the desire to find an external cause for their child's condition, resulting in a focus on allergy by many parents. It may also explain how relentless some parents can be in the search for such a cause, despite an intellectual appreciation that the disease is genetically determined.

Fear of topical corticosteroids did emerge as a major deterrent to effective treatment. All parents expressed an initial fear of topical corticosteroids before seeking treatment. Concern that topical corticosteroids use would 'thin the skin' was the major concrete fear; however, a vaguer concern about unknown long-term effects was also voiced. The term 'use sparingly' on labels dispensed by pharmacists emerged as a major deterrent to correct use. This has previously been documented in a UK study.²⁰

Sources of fear of topical corticosteroids included not only the Internet and similarly worried friends and relatives, but also general practitioners and pharmacists.

With regard to complementary therapy, parents related that the media and the Internet placed a great emphasis on natural products and focussed on allergy as having a central role in the aetiology of atopic dermatitis. Their preference in treatment order was to commence therapy with something 'natural' and move on to topical corticosteroids only when the atopic dermatitis was 'very severe'. Parents also felt under pressure from family, friends and even school teachers to avoid 'dangerous and unnecessary' medical treatment.

When prompted to discuss their understanding of what a 'natural product' was, parents were unable to give a clear answer. However, their belief was that it was safer and would have fewer side-effects than topical corticosteroids. Parents did not have an understanding of regulatory testing, including safety testing. Thus, despite the excellent therapeutic results available using conventional medicine, parents still sought unproven complementary treatments. The simplistic theories on which these preferences are based are easily understood by lay people, but have been noted in the past to result in the withholding of effective treatment.²¹

Despite the well-documented impact on quality of life, an unexpected finding was that parents related how difficult it had been to convince their general practitioner to refer them to a dermatologist for what was allegedly seen by the general practitioner as a trivial condition, and one for which the dermatologist would offer nothing over and above the general practitioner. This was a great source of frustration.

A theme that emerged which was relevant to beliefs about medical treatment was the parents' inability to accept the concept of 'Control rather than cure' that is central to effective atopic dermatitis management. Recurrence of disease during treatment or when treatment was suspended was a source of disappointment and discouragement relating to a poor acceptance of the need to control a chronic condition. This underpinned rejection of topical corticosteroids, which parents saw as simply masking the underlying condition. Their hope was not for treatment but for cure and this was another reason for the search for an allergen that, if avoided, would resolve the atopic dermatitis. This also explained the preference for naturopathy, which itself focuses on allergy and promises cure.

All of the parents in the group had initially been scared of topical corticosteroids but had been persuaded to use them effectively to control their children's disease. They related that the influences that changed their attitude were the rapid improvement witnessed during inpatient treatment, interaction with nursing staff who confidently showed use of topical corticosteroids, improved quality of life of the child and family once the atopic dermatitis was under control, and gaining an understanding of safety issues from a trusted source. Parents voiced the view that 'knowledge is power' but that knowledge must be from what is perceived to be a reliable source. When asked for examples, they nominated an Australian university or teaching hospital as being most reliable.

An interesting point that emerged was how important it was to the parents to have a trusting relationship with a dermatologist and how early referral to a dermatologist would have saved them a great deal of uncertainty and suffering. This has been reported previously.²²

Parents also saw the involvement of other specialists, particularly allergists, as positive, even when the outcome of investigation was to rule out allergy in their children. This is not surprising when one understands the significance that parents place on allergy and suggests that dermatologists will validate their patients' concerns and thus improve compliance by carrying out allergen testing, even if they expect the outcome to have minimal impact on management.

The key suggestions for dermatologists which emerged from the study are shown in Tables 5 and 6. Dermatologists should understand the sources of parental concern and realize that corticosteroid 'phobia' is in fact a rational fear generated by misinformation, which can be modified by correct information. They should not underestimate the power of the trust that a patient will place in them if they provide adequate support, which involves alleviating guilt, providing facts and encouraging an understanding of the chronic nature of atopic dermatitis. Despite the fact that

Table 5 Suggestions for dermatologists

- Understand, respect and validate parental concerns
- Do not dismiss the desire to investigate allergy
- Alleviate guilt
- Emphasize the positives: outcome, safety, prognosis
- Encourage acceptance of 'no cure'
- Use your hospital
- Re-educate pharmacists
- Realize parental trust in you is a major factor
- Empower parents to withstand negative forces
- Provide written and videotaped information that addresses parents fears
- Encourage general practitioners to refer children with atopic dermatitis

Table 6 Suggested information to increase parental confidence

- Safety data on topical corticosteroids
- Safety data on moisturizers
- Information on relative potencies of prescribed topical corticosteroids
- Demonstration of use of topical corticosteroids
- Understanding of the concept of scientific testing
- True role of allergy in atopic dermatitis
- Explanation of how topical corticosteroids work in atopic dermatitis
- Possible outcomes of failure to treat
- Importance of improving the child's quality of life

allergy is of limited importance in many patients, a willingness to validate parental hopes by investigating is seen as part of this support.

Parents require empowerment to withstand the many negative influences they encounter on a day-to-day basis. When providing facts, ensuring that parents see them as coming from a reliable source and including information on the parent's areas of concern is important. The use of video recordings was also seen as very helpful. Utilization of a hospital stay emerged as a powerful tool and one which dermatologists should not hesitate to use.

Finally, re-education of other healthcare providers, particularly pharmacists and general practitioners, emerged as a potential solution which could help to improve confidence in medical treatment.

CONCLUSIONS

Atopic dermatitis has a substantial effect on the quality of life of the subject child and the entire family. Children and parents suffer needlessly because of inadequate disease control as a result of poor compliance. Fear of treatment, particularly with topical corticosteroids, is a realistic reaction to misinformation, much of which comes from sources which patients trust: their general practitioners and pharmacists. An understanding of parents' difficulties and fears provides a framework from which dermatologists can develop strategies to increase confidence in treatment and improve quality of life.

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