

Evolving Aesthetic Expectations in Patients with Moderate-to-Severe Atopic Dermatitis amidst Emerging Targeted Therapies

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Conflict of interest: none

Objective

- To investigate cosmetic demands and treatment patterns after taking advanced treatment in patients with moderate-to-severe AD

Takeaway message

- AD patients who have undergone advanced therapies with dupilumab or JAKi : their eczematous lesions had improved tremendous the AD patients became interested in their cosmetic problems

- It is necessary to identify the cosmetic needs of AD patients, and then appropriate cosmetic treatments should be performed accordingly, resulting in improvement of their QoL in patients with AD ultimately

[Background]

- **Atopic dermatitis (AD)** is the most common chronic inflammatory skin disease
 - characterized by **chronic distressing pruritus** and **body image disfiguration**
 - can **impact on quality of life (QoL)**
- Effective **advanced therapies such as dupilumab & janus kinase inhibitors (JAKi)** were developed
 - As eczematous skin lesions in patients with AD get improved, **the patients became interested in cosmetic problems** that they didn't care about much before

[Objective]

- To investigate cosmetic demands and treatment patterns after taking advanced treatment in patients with moderate-to-severe AD

[Methods]

- Retrospective study through electronic medical record analysis
- From May 2024 to April 2025, 27 patients who had been treated with their cosmetic problem while using dupilumab and/or oral JAKi
 - : All patients achieving at least 90% improvement in Eczema Area and Severity Index score (EASI-90)

[Results (1)]

Variables	Overall (n=27)
Age, mean years (range)	25.1 (13-52)
Sex, n (%)	
Male	17 (63.0)
Female	10 (37.0)
Cosmetic problems (%)	
Acne/acne scar	15 (55.6)
Warts	8 (29.6)
Hyperpigmentation	5 (18.5)
Hypopigmentation	1 (3.7)
Flushing	2 (7.4)

Table 1. Patients' characteristics

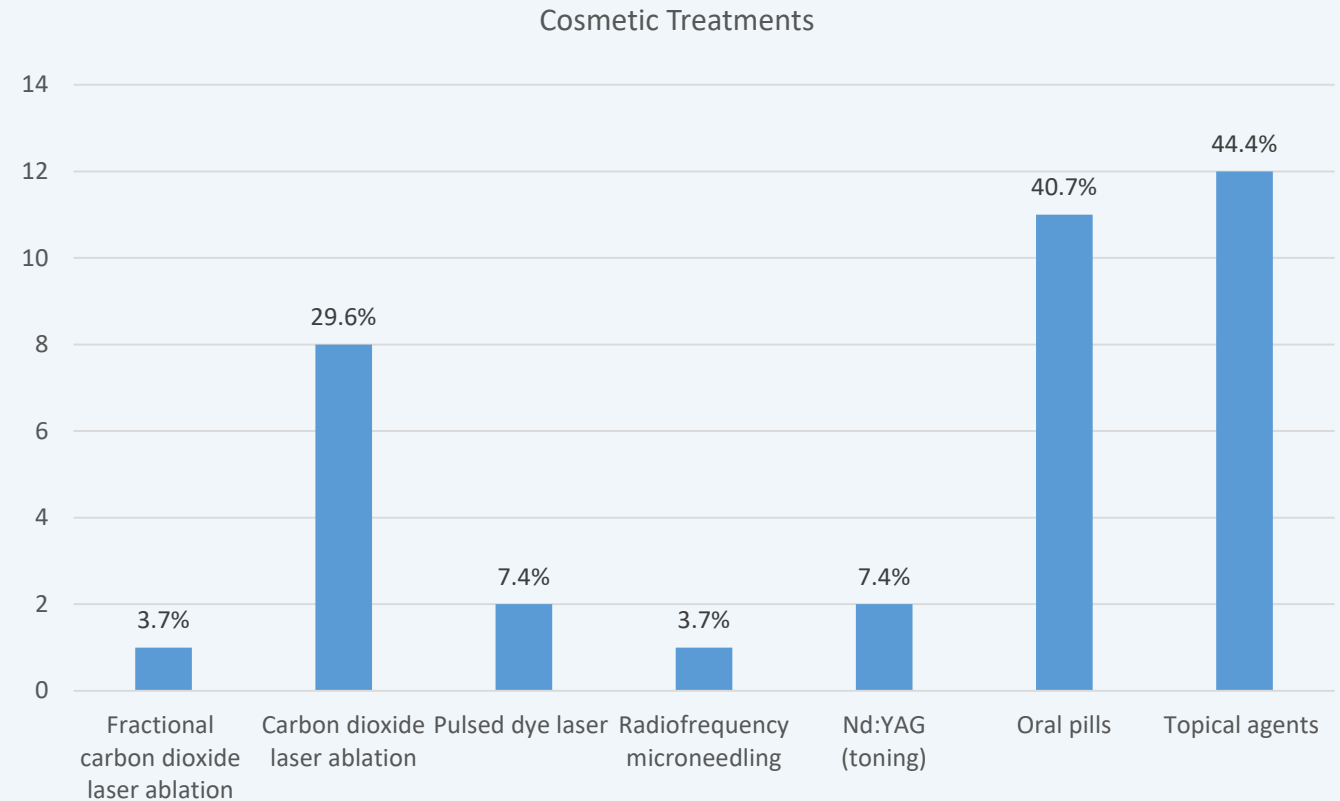
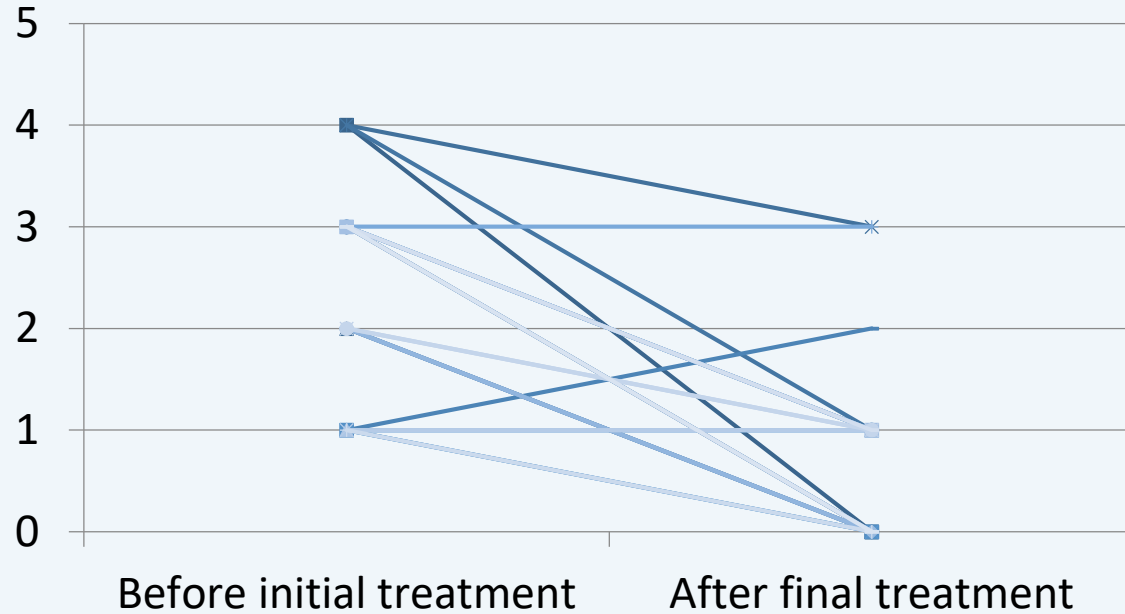


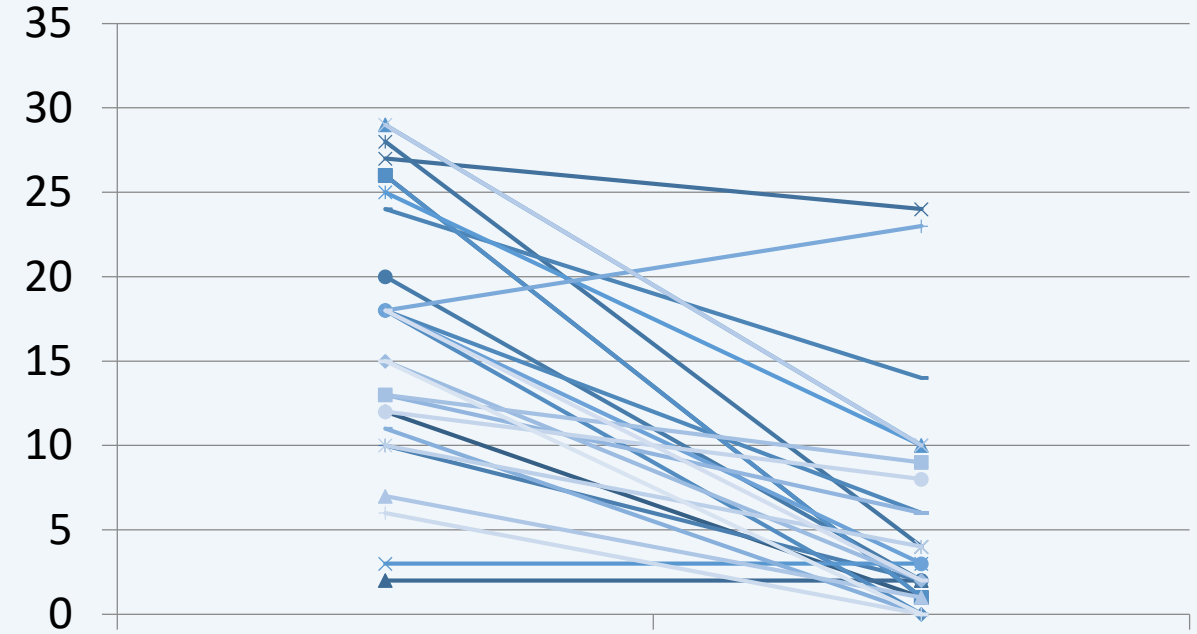
Figure 1. Methods of cosmetic treatment

[Results (2)]



◆ 1 ■ 2 ▲ 3 × 4 * 5 ● 6 + 7 — 8 — 9
 ◆ 10 ■ 11 ▲ 12 × 13 * 14 ● 15 + 16 — 17 — 18
 ◆ 19 ■ 20 ▲ 21 × 22 * 23 ● 24 + 25 — 26 — 27

Patient's Global Assessment (PtGA)



Before initial treatment After final treatment

◆ 1 ■ 2 ▲ 3 × 4 * 5 ● 6 + 7 — 8 — 9
 ◆ 10 ■ 11 ▲ 12 × 13 * 14 ● 15 + 16 — 17 — 18
 ◆ 19 ■ 20 ▲ 21 × 22 * 23 ● 24 + 25 — 26 — 27

Dermatology Life Quality Index (DLQI)

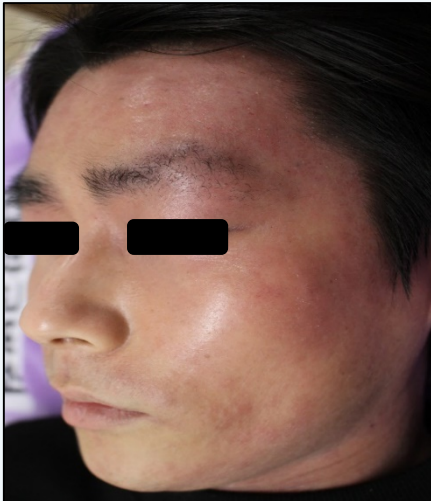
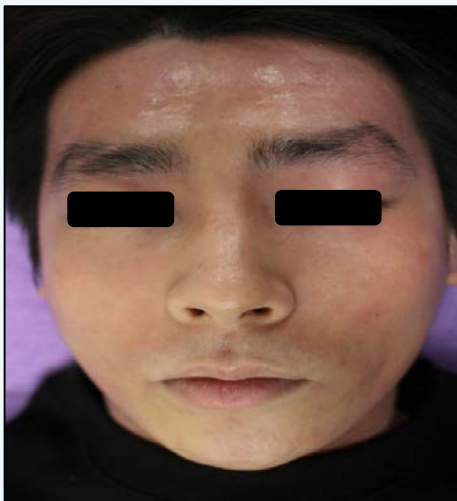
Figure 2. Assessment of patients' satisfaction

[Clinical photos (1)]



M/24, [Facial flushing](#)

PtGA 4 before laser Tx.
(during baricitinib 4mg for 14wks)

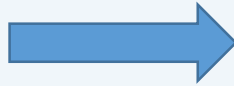


PtGA 2 after pulsed dye laser #3
(during baricitinib 4mg for 37wks)

[Clinical photos (2)]



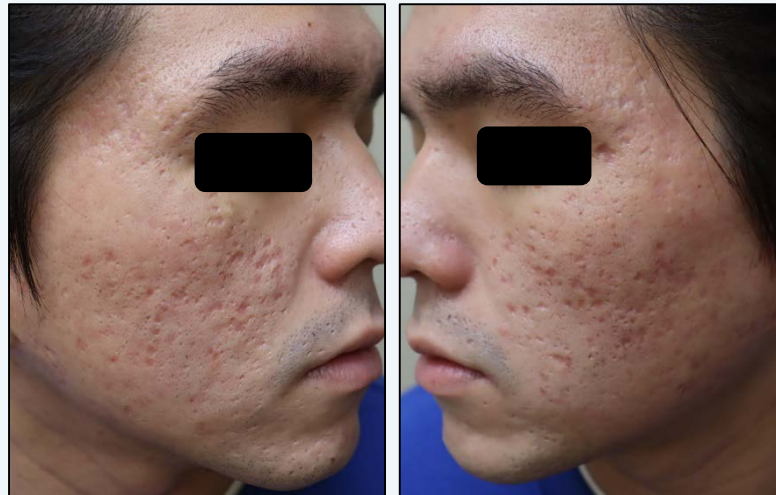
F/25, PIH



PtGA 4 before laser Tx.
(during dupilumab #10)



PtGA 1 after laser toning #6
(during dupilumab #35)



M/22, Acne scar



PtGA 4 before laser Tx. + CROSS
(during dupilumab #30)



PtGA 2 after laser Tx. + CROSS #2
(during dupilumab #35)

[Discussion (1)]

- AD might cause **body image disfiguration**
 - increasing evidence of the elevated risk of developing psychosocial and mental comorbid diseases in young patients with severe AD
 - **impact on quality of life (QoL)**

	Disease impact of AD
Overall QoL impairment	- <u>Greatest negative impact on HRQoL among chronic skin disorders</u> including urticaria, alopecia, acne, localized eczema, and vitiligo
Itch and sleep disturbance	- Frequent scratching due to itching - Decreased sleep efficiency, trouble getting to sleep, reduced total sleep time, difficulty waking up, daytime drowsiness, and irritability
Psychosocial/ mental comorbidities	- <u>Body image disfiguration</u> - Behavioral and maladjustment problems, sibling rivalry, abnormal psychological development, childhood low self-esteem, and lack of socialization skills, excessive dependency, clinginess, fearfulness, and damaged social functioning - Increased risk of ADHD, depression, anxiety, conduct disorder, autism, and suicidal ideation and behavior
Comorbidities	- Comorbid asthma, hay fever, food allergies, cutaneous infections, and possibly cardio-metabolic comorbidities - Shorter stature, delayed growth, and early childhood obesity
Impact for caregivers and family	- Greater impact than having a child with type 1 diabetes - Sleep deprivation, anxiety, depression, exhaustion, frustration, helplessness, feelings of guilt, and instability of spousal and other familial relationships

[Discussion (2)]

- **Advanced therapies** such as dupilumab and JAKi can almost **clear their eczematous lesions**
 - but **there still might remain certain needs** for treating cosmetic problems like acne, acne scar, warts, and dyspigmentation excluded from the priorities of treatment in the past
- There were several studies about **unmet needs in AD management**
 - addressing unmet needs of AD patients through a combination of appropriate access to services, appropriate diagnosis, and appropriate use of existing approaches is important
- Albeit severe AD patients might achieve EASI-90 by dupilumab or JAKi,
 - **in terms of holistic approach, dermatologists should consider *not only* the treatment of atopic eczema *but also* the cosmetic problem left behind eczematous lesions clear**

J Dermatolog Treat. 2020; 31(8): 801–809.

[Conclusion]

- AD patients who have undergone **advanced therapies** with dupilumab or JAKi
 - their eczematous lesions had improved tremendously
 - **the AD patients became interested in their cosmetic problems**
- It is **necessary to identify the cosmetic needs** of AD patients, and then appropriate cosmetic treatments should be performed accordingly, **resulting in improvement of their QoL in patients with AD ultimately**