

Cosmetic options for the Dermatological manifestation of PCOS

Dr Rasya Dixit

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

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Dermatological manifestations in PCOS¹

- Acne – Resistant or recurrent (95%)
- Hirsutism(60%)
- Seborrhea(47.5%)
- Acanthosis nigricans(20%)
- Female Pattern hair loss(12.5%)

Hirsutism and AN are reliable markers for biochemical hyperandrogenism ²

1. J Eur Acad Dermatol Venereol 2015 Jan;29(1):42-7. Cutaneous manifestations of the subtypes of polycystic ovary syndrome in Korean patients.Hong JS, Kwon HH, Park SY Jung JY et al.
2. JAMA Dermatol 2016 Apr;152(4):391-8. Cutaneous Findings and Systemic Associations in Women With Polycystic Ovary Syndrome.Schmidt TH, Khanijow K Cedars MI

Hirsutism in PCOS – Why to treat

Clinician vs Self-ratings of Hirsutism in Patients With Polycystic Ovarian Syndrome Associations With Quality of Life and Depression

JAMA Dermatol. 2016;152(7):783-788.

- Ferriman Galaway score – Patient and Physician
- Skindex QOL assessment
- Beck Depression inventory Fast Screen
- FG score Mean Patient 13.3/ Physician Mean 8.63



Hirsutism in PCOS – How to treat

- Traditional depilation – Waxing, Plucking, Threading, Depilatory creams – Cause inadvertent damage to epidermis - Post inflammatory hyperpigmentation
- Pseudofolliculitis and Follicular prominence appearance
- Laser Hair Reduction : Targets melanin in the hair root – results are predictable, long growth delay between treatments, improvement of overlying skin



Hirsutism in PCOS – Challenges with LHR

- In women with PCOS, laser treatment is associated with a poorer than expected reduction in hair counts and Hair Free Interval following treatment. However, offering more than six treatments does have additional benefits in terms of prolonging HFI and overall patient satisfaction with treatment is very high.³
- LHR Reduces severity and anxiety in this subgroup.⁴

3. J Plast Reconstr Aesthet Surg 2007;60(4):426-31. Laser hair removal in women with polycystic ovary syndrome. McGill DJ, Hutchison C McKenzie E McSherry E Mackay IR

4. Br J Dermatol. 2005 May;152(5):986-92. A randomized controlled trial of laser treatment among hirsute women with polycystic ovary syndrome. Clayton WJ, Lipton M, Elford J

Hirsutism in PCOS – Challenges

- More number of session to achieve clinical results (8.1 Treatment sessions vs 5).⁵

5. J Nepal Health Res Counc 2014 Jan;12(26):59-62.

Hormonal profile and efficacy of long pulse Nd-YAG laser in treatment of hirsutism.

Karn D, K C S, Timalisina M, Gyawali P

Improving the outcome of LHR in PCOS

- Hirsutism increases with weight gain ⁶
- Increased insulin sensitivity by metformin enhances IPL assisted hair removal in patients with polycystic ovary syndrome. ⁷
- Finasteride helps reduce FG score ⁸

6. Endocr Pract. 2015 Nov;21(11):1291-300. AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS, AMERICAN COLLEGE OF ENDOCRINOLOGY, AND ANDROGEN EXCESS AND PCOS SOCIETY DISEASE STATE CLINICAL REVIEW: GUIDE TO THE BEST PRACTICES IN THE EVALUATION AND TREATMENT OF POLYCYSTIC OVARY SYNDROME--PART 1. Goodman NF, Cobin RH, Futterweit W, Glueck JS

7. Dermatology. 2009;218(3):231-6. Increased insulin sensitivity by metformin enhances intense-pulsed-light-assisted hair removal in patients with polycystic ovary syndrome. Rezvanian H, Adibi N, Siavash M, Miner

8. J Clin Endocrinol. 1997 Oct;49(10):463-8. Finasteride and flutamide in the treatment of hirsutism. Falsetti L, De Fusco D, Rosina B

Before laser hair reduction

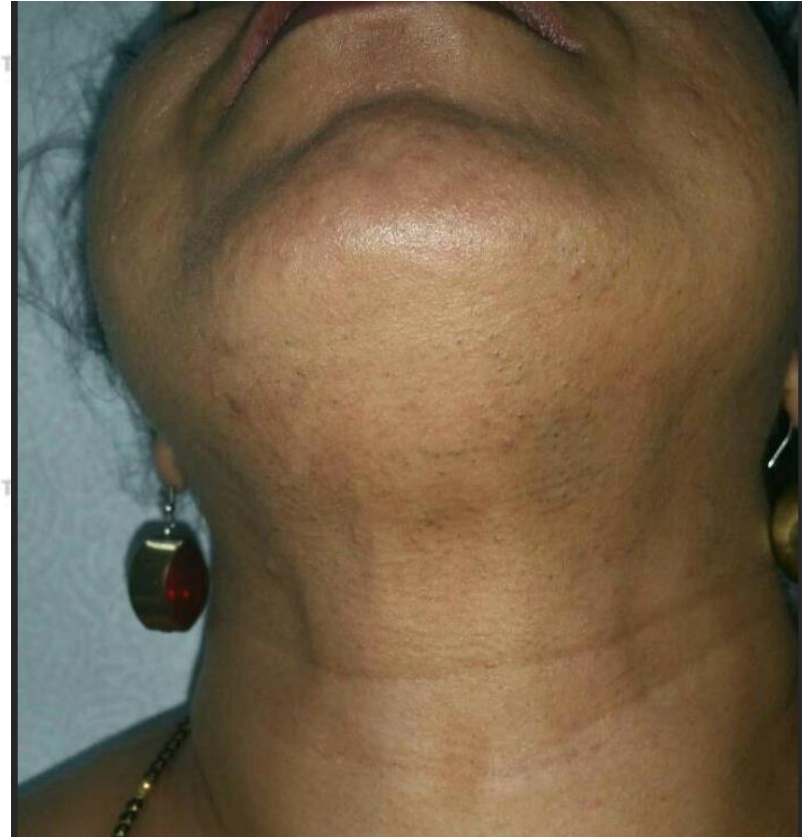
After 4 sessions



Before laser hair reduction



After 8 sessions



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Before

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After

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Acne in PCOS

- Can be resistant, recurrent
- Look for PCOS in adults with acne
- Look for PCOS in patients resistant to Isotretinoin
- Metformin in adolescents and young adults
- Spironolactone and OCPs in older patients
- Isotretinoin in cumulative doses



Adult acne on isotretinoin and OCP





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Should you evaluate all patients with acne for androgen excess?⁹

- Amsterdam ESHRE/ASRM-sponsored third PCOS Consensus Workshop Group suggested that acne is not commonly associated with hyperandrogenemia
- 207 women, aged between 18 and 45 years, suffering mainly from acne at a university
- 72% of acneic women had clinical and/or biochemical hyperandrogenemia, with the most common cause being PCOS

9 Eur J Obstet Gynecol Reprod Biol 2017 Jan 23;211:21-25. Is acne a sign of androgen excess disorder or not?
Uysal G, Sahin Y, Unluhizarci K

What cosmetic treatments can we offer?

- Chemical peels – Salicylic, Glycolic, Retinol, Black peels and TCA
 - Exfoliation, reduction in acne, comedones
 - Reduction in post inflammatory hyperpigmentation
 - Reduction in scarring
 - Faster recovery and decreases need for higher doses of medication
- Biolight– LED
 - Reduced the sebum secretion by targeting porphyrins in the P acnes
 - Reduces the inflammation by biomodulation



Cosmetic treatment for acne

- Laser photofacials
- Microneedle RF treatments
- TIXEL
 - Target the seborrhea and decrease the pigmentation
 - Help to reduce acne scars



Acanthosis nigricans

- Weight loss
- Alpha lipoic acid, myoinositol evidence?
- Metformin
- TCA peels¹⁰
- Fractional CO2 laser, long pulsed Alexandrite laser¹¹

10. J Dermatolog Treat. 2014 Jun;25(3):223-5. Using trichloroacetic acid in the treatment of acanthosis nigricans: a pilot study. Zayed A, Sobhi RM, Abdel Halim DM

11. Caspian J Intern Med. 2016 Fall;7(4):290-293. Comparison of long-pulsed alexandrite laser and topical tretinoin-ammonium lactate in axillary acanthosis nigricans: A case series of patients in a before-after trial. Ehsani A, Noormohammadpour P, Goodarzi A

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Female pattern hair loss

- 5 % Minoxidil vs 3%¹²
- Oral Finasteride vs topical finasteride
- Spironolactone
- Biotin, Zinc, Caffeine
- Low level laser therapy
- PRP¹³

12. J Biol Regul Homeost Agents. 2016 Oct-Dec;30(4):1153-1155. Minoxidil dose response study in female pattern hair loss patients determined to be non-responders to 5% topical minoxidil. McCoy J¹, Goren A², Kovacevic M², Shapiro J

13. Double-Blind, Placebo-Controlled Pilot Study on the Use of Platelet-Rich Plasma in Women With Female Androgenetic Alopecia. Puig CJ, Reese R, Peters M. Dermatol Surg. 2016 Nov;42(11):1243-1247

Female pattern hair loss



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UNLIKE A

BOY GIRL



Support
PCOS
Awareness

Thank You!

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