

Management of **Dermatology** *in Nutshell*

Ranjan C Raval
Krina B Patel

Foreword
PB Haribhakti



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■ MANAGEMENT OF ANDROGENETIC ALOPECIA

Introduction

Androgenetic alopecia (AGA) or hereditary baldness affects almost 50% of men > 40 years of age and almost 75% of women > 65 years. AGA is characterized by thinning of hair in the frontal and vertex areas of the scalp with minimal loss of marginal parietal and occipital hair. Women present with widening of the central parting followed by gradually increasing diffuse thinning of hair over the scalp. The diagnosis of AGA in men is usually not difficult.

■ THERAPEUTIC APPROACH

Counseling

- Patient should be counseled about the fact that AGA is the genetically determined process and can only be slowed down
- All the treatment options like medical, surgical, cosmetic, supportive (vitamins, amino acids and trace elements) and others (platelet rich plasma therapy, gene therapy, stem cell hair multiplication) should be explained with advantages and disadvantages of each (with realistic expectations)
- Adequate diet should be maintained.

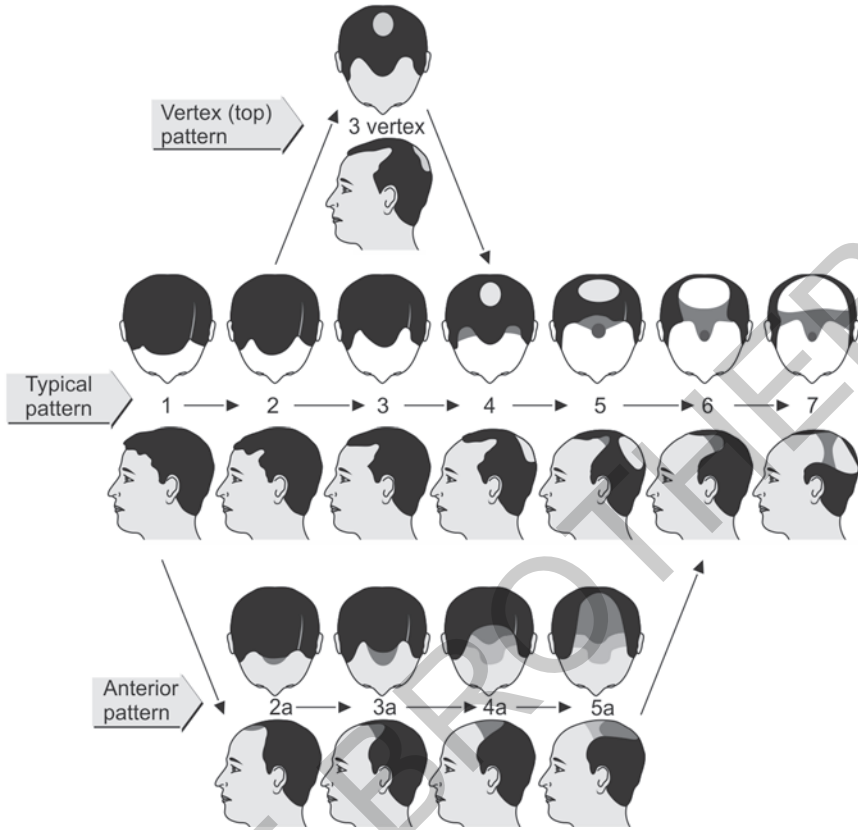


Figure 2.1: Classification of male pattern baldness



Figure 2.2: Ludwig patterns of hair loss in women

Diagnostic approach

Androgenetic alopecia

History:

Duration and pattern of hair loss
 Hair coming out by roots/breaking
 Increased shedding/thinning apparent
 Age of onset
 Drug history
 Relationship with menses, pregnancy or menopause
 Present and past health
 Thyroid gland functioning
 Family history of hair loss
 Unusual hair care
 Use of hair cosmetics
 Dietary history

Scalp examination:

Figure 2.1: Norwood-Hamilton classification of male pattern baldness

Figure 2.2: Ludwig patterns of hair loss in women

1. Increasing spacing between hairs
2. Thinning in frontal or parietal areas
3. Rim of hair along the frontal hairline is retained
4. May have mild bitemporal recession
5. "Central part" looks wider in front
6. Pony tail is thinner
7. Miniaturized hairs of varying diameter and length

Tests:

1. Hair pull test: Negative
2. Contrast paper for miniaturized hair
3. Dermoscopy for miniaturized hair
4. Scalp biopsy: Two sites: horizontal and vertical sections
 Terminal/Vellus like ratio 2:1
 Anagen/Telogen % 83:17

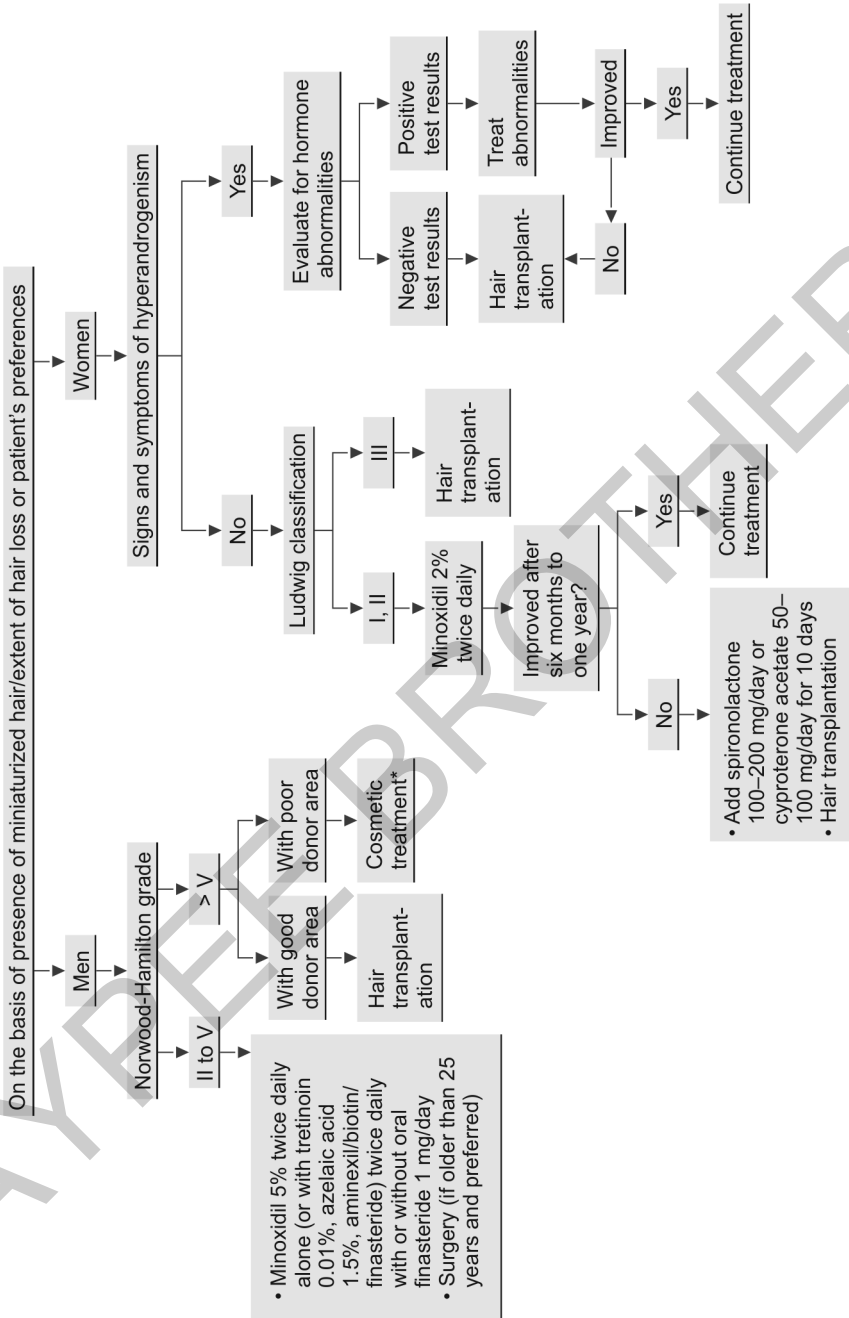
History and examination for signs of androgen excess

No

Usually no laboratory studies

Yes

Total testosterone
 DHEAS
 Prolactin
 TSH
 USG abdomen with pelvis
 Heavy or long lasting menses
 Iron, iron binding capacity
 Ferritin



* Cosmetic treatment includes wigs, hair weaving and hair piece (not preferred because of its side effects)

MULTIPLE CHOICE QUESTIONS

1. Hair transplant surgery is indicated in:
 - a. Norwood-Hamilton grade V
 - b. Norwood-Hamilton grade greater than V
 - c. Norwood-Hamilton grade greater than IV
 - d. Norwood-Hamilton grade III–V
2. Result of hair pull test is _____ in AGA. (Positive/Negative)
3. Scalp biopsy findings in AGA are:
 - a. Terminal/vellus like ratio 2:1
 - b. Anagen/telogen % 83:17
 - c. Both of the above
 - d. None of the above
4. Investigations recommended for female patients of AGA with signs of virilization are:
 - a. Serum testosterone, DHEAS
 - b. Serum iron, iron binding capacity, serum ferritin
 - c. Serum TSH
 - d. All of the above
5. Ludwig scale type III shows:
 - a. Thinning at the crown of head
 - b. Nearly full hair loss at the crown of head
 - c. Thinning of hair beginning at the center part
 - d. None of the above

Answers

1. b 2. Negative 3. c 4. a 5. b

■ MANAGEMENT OF HIRSUTISM

Introduction

Hirsutism is defined as excessive terminal hair that appears in a male pattern (i.e. sexual hair) in women. Hirsutism affects 5–10% of women. Unwanted hair growth can be associated with significant psychosocial consequences that negatively affect patients quality of life.

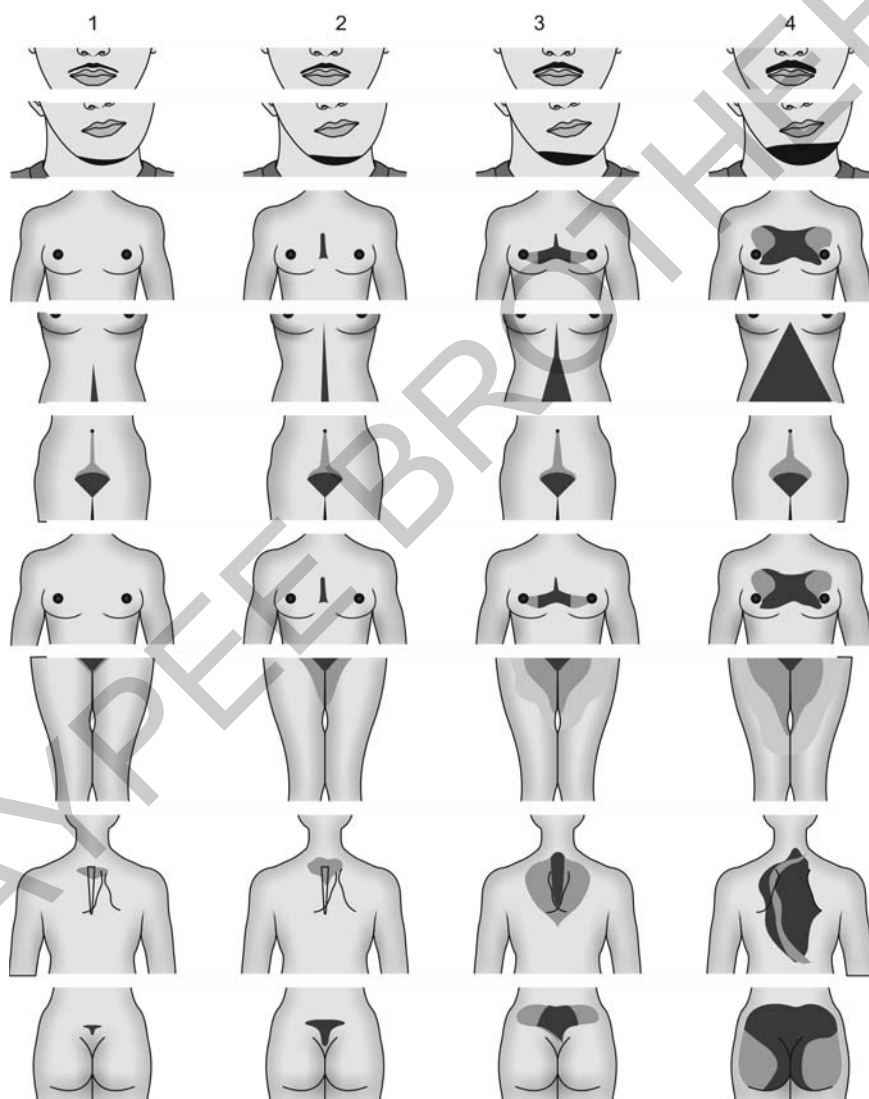
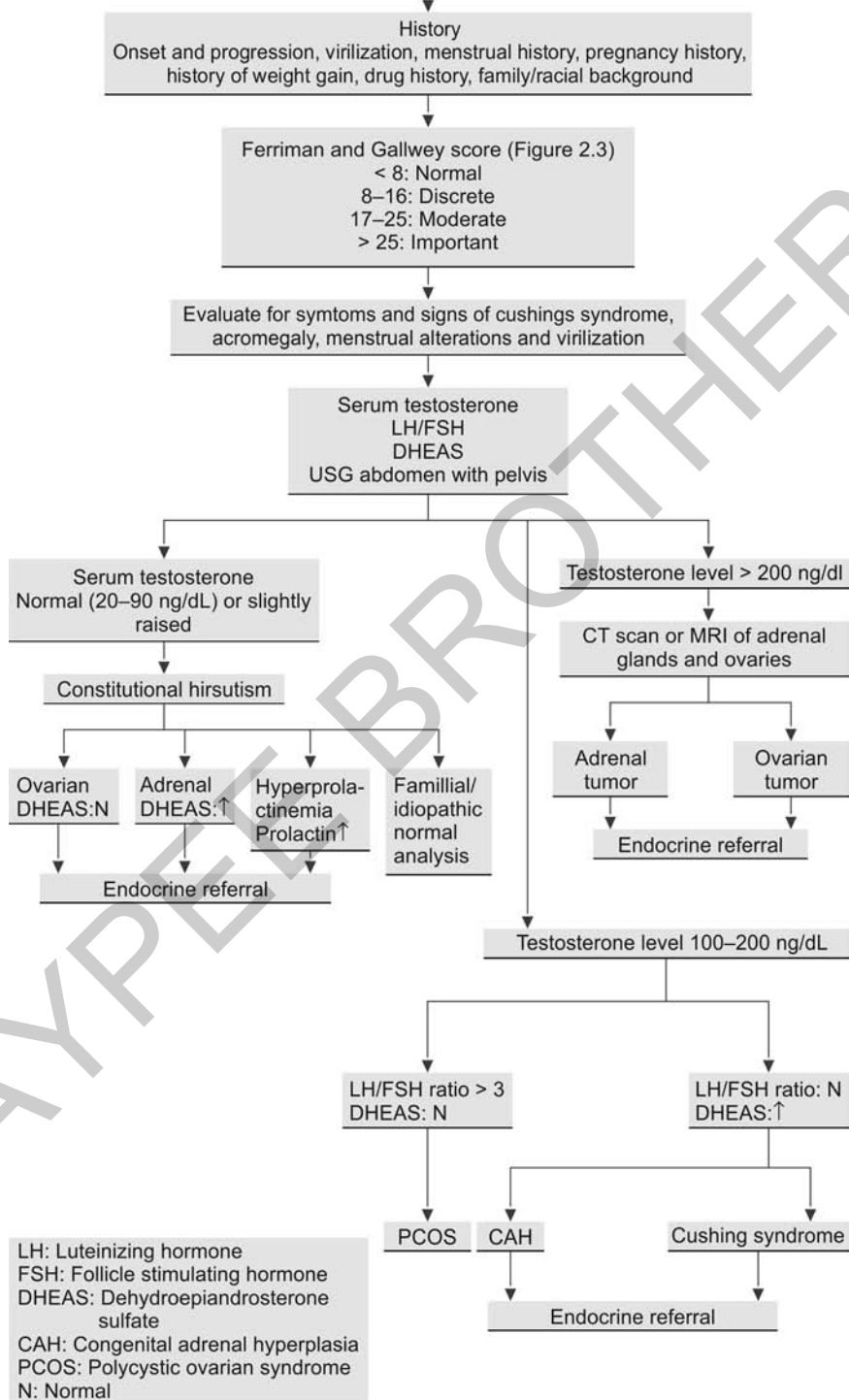
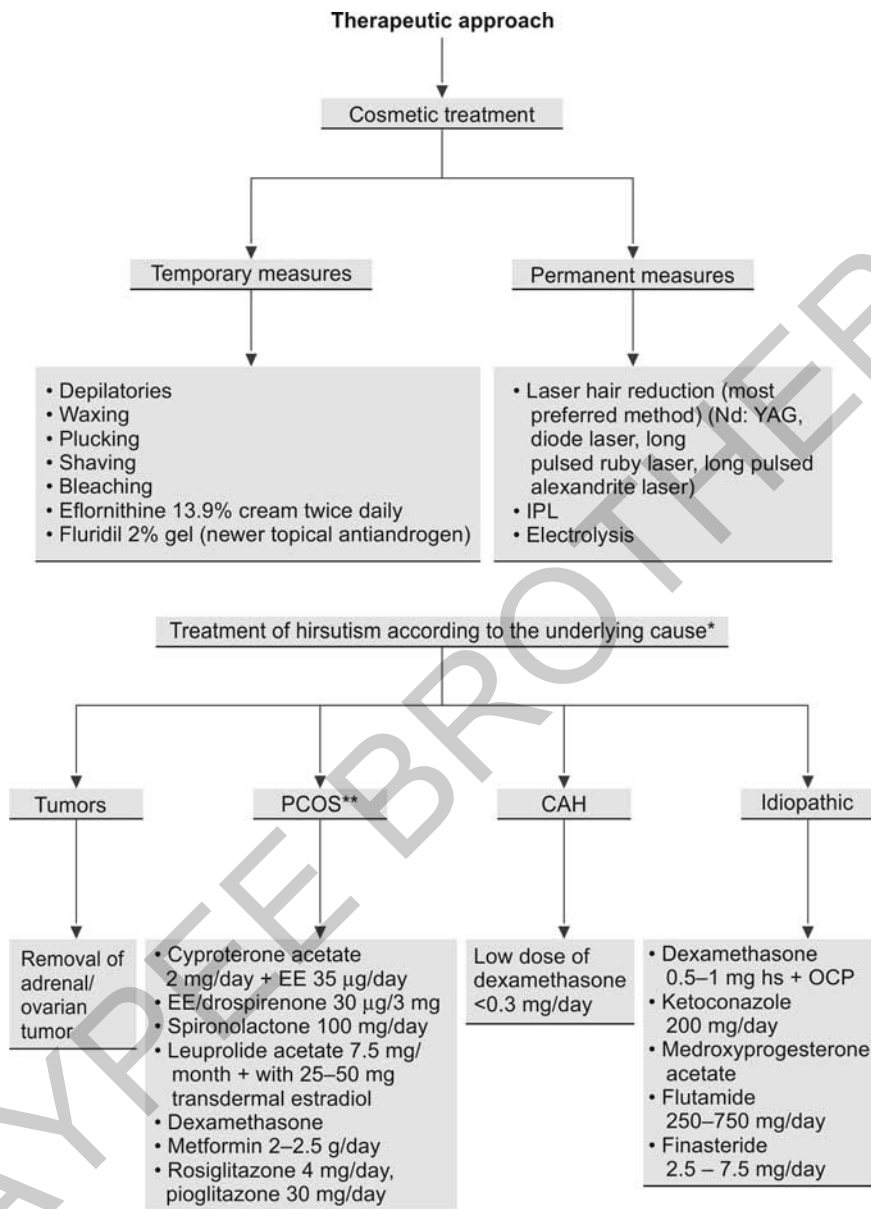


Figure 2.3: Degrees of Hirsutism-Ferriman and Gallwey score for 9 sites (upper lip, chin, chest, arms, upper and lower abdomen, upper and lower back, thigh: score for density of terminal hair at each site graded 0–4)

Diagnostic approach



Androgenic Alopecia and Hirsutism



*The drugs reduce the facial hair diameter but cosmetic measures may still be needed

**Diet, exercise and weight reduction in obese patients

PCOS: Polycystic ovarian syndrome
CAH: Congenital adrenal hyperplasia
EE: Ethinyl estradiol

MULTIPLE CHOICE QUESTIONS

1. Hirsutism is defined as excessive _____ hair that appears in a male pattern (i.e. sexual hair) in women.
 - a. Vellus
 - b. Terminal
 - c. Lanugo
 - d. Intermediate
2. Total number of sites included in Ferriman and Gallwey score are:
 - a. 7
 - b. 8
 - c. 9
 - d. 6
3. Hormonal findings in polycystic ovarian syndrome are:
 - a. LH/FSH ratio < 3 and DHEAS normal
 - b. LH/FSH ratio > 3 and DHEAS normal
 - c. LH/FSH ratio < 3 and DHEAS raised
 - d. LH/FSH ratio > 3 and DHEAS decreased
4. Cosmetic treatment is not required for patients of hirsutism with underlying cause. True/False.
5. Which of the following is a temporary treatment measure for hirsutism?
 - a. Electrolysis
 - b. Long pulsed Nd: YAG laser
 - c. Long pulsed ruby laser
 - d. Eflornithine 13.9% cream

Answers

1. b 2. c 3. b 4. False 5. d

Management of Dermatology in Nutshell

This novel book provides rapid and easy review of management of common cutaneous dermatoses; for both students and practitioners. In an era of tremendous expansion of medical field, a review of a particular subject may demand surfing of various media. This book is compiled with the aim of giving rapid, primary guidelines in regards to diagnosis and treatment—encompassing management as a whole. We have tried to cover all common diseases in day-to-day dermatology practice from acne and alopecia to vesiculobullous disorders.

Ranjan C Raval MD DVD is Professor and Head, Department of Dermatology at Smt NHL Municipal Medical College and VS Hospital, Ahmedabad, Gujarat, India. She was awarded the Glaxo oration, (National) 2003 in urticaria and Haribhakti oration, (State) 2009 for pemphigus. She has 30 years of experience in the field of dermatology and has published more than 60 papers in national and international journals. She has been invited as a Guest Speaker in many State, National and International conferences. She was the Vice-President for IADVL for the year 2010. She was the scientific chairperson for West Zone Dermazone for the year 2009 and was the Organizing Secretary of DERMACon in 1996 and 2013. She has been advisor to the Gujarat Public Service Commission and examiner for various State Universities examinations in MD, Diploma and DNB dermatology. She has been the Medical Council of India inspector. Her areas of interest are blistering diseases, acne, psoriasis, vitiligo, and urticaria.



Krina B Patel MD DVD is an Associate Professor and Head, Department of Dermatology, GMERS Medical College and Hospital, Sola, Ahmedabad, Gujarat, India. Her area of interest is in clinical dermatology and dermatopathology. Having a keen interest in academics, she is always ready to introduce new methods of teaching and learning in undergraduate as well as postgraduate teachings. She has a large number of publications in journals and books to her name. She is actively involved in academics and different activities of IADVL. She was Scientific Secretary for DERMACon, 2013. She has been elected as a Joint Secretary, IADVL from 2014.



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