Management of Alopecia

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Introduction

- Alopecia affects both men and women
- Variety of causes
- Substantial emotional impact
- Medical and surgical therapy available
- Realistic treatment plan
Etiology of Alopecia

- trauma
- burns
- neoplasms
- autoimmune disorders
- chemotherapy
- dermatologic conditions
- androgenetic alopecia
Androgenetic Alopecia

- most common cause of alopecia
- three distinct forms recognized-MPAA, FPAA, diffuse AA
- caucasians most commonly affected
- mode of inheritance unclear
- terminal hairs to vellus hairs
- presence of androgens (esp. DHT) essential
- mechanism of action on follicles unclear
Patient Selection

- general history and physical examination
- patient’s motivations and expectations
- discussion of Tx options and limitations
- pattern of alopecia incl. frontal hairline and donor hair
- conservative approach
- older patients typically better candidates
Treatment Options

- medical
- non-surgical hair restoration
- surgical hair restoration
Medical Management

- antiandrogens
- biologic response modifiers
Antiandrogens

- spironolactone
- cyproterone acetate
- cimetidine
- estrogen and progesterone
- finasteride (Propecia)
Biologic Response Modifiers

- minoxidil (Rogaine)
Surgical Management

- punch-graft hair transplantation
- minigrafts and micrografts
- scalp reduction
- extensive scalp reduction
- tissue expansion
- transposition flaps
Punch-Graft Hair Transplantation

- autografts
- standard plugs 4 mm diam.
- multiple sessions
- adequacy of donor sites-finite number of donor hairs
- technique
Minigrafts and Micrografts

- minigraft-3 to 8 hairs each, created from quadrisection of 4.5 mm diam. grafts
- micrografts-1 to 2 hairs each, created from periphery of standard punch grafts
Scalp Reduction

- various patterns-midline sagittal ellipse, Y, and lateral
- reduce area of alopecic scalp with elevation of temporal fringes toward midline
- reduce recipient:donor ratio
- ideal-older pt with stable mild to moderate area of alopecia of crown/vertex
Extensive Scalp Reduction

- differ from standard scalp reduction in degree of undermining required
- usu. combination of bilateral occipitoparietal and bitemporal flaps
- remaining frontal alopecic areas are hair transplanted
- technique
- increased incidence of complications
Tissue Expansion

- scalp reduction or advancement limited by poor scalp flexibility
- scalp stretched with redistribution of donor hair over wider surface area
- variety of expanders available
- repeated injection and discomfort, temporary scalp deformity
Transposition Flaps

- relatively rapid restoration of frontal hairline
- Juri flap-pedicled on superficial temporal artery
- multiple stages
- technique
Complications

- cobblestoning
- divot/delling
- compression
- cyst formation
- telogen effluvium
- folliculitis
- arteriovenous fistula
- pyogenic granuloma
Complications (cont.)

- stretch back
- slot defect
- scalp necrosis
- inappropriate shape of hairline
- inappropriate hair direction
- hair loss
Summary

- conservative approach
- realistic treatment plan
- long-term commitment
- expect the worst
- the more you need, the less you have