
Contents

Part I Aesthetic Medicine

- 1 Defining Aesthetic Medicine** 3
Peter M. Prendergast
- 2 Ethical Aspects of Aesthetic Medicine** 7
Urban Wiesing

Part II Preoperative

- 3 Medical History** 15
Melvin A. Shiffman
- 4 Clinical Assessment of Facial Aging** 19
Melvin A. Shiffman
- 5 Assessment and Treatment of Excess Weight** 29
Melanie T. Turk
- 6 Phytonutrient and Phytotherapy for Improving Health** 47
Jian Zhao
- 7 Skin Imaging in Aesthetic Medicine** 59
Peter M. Prendergast
- 8 Cosmeceutical Treatment of the Aging Face** 69
Jennifer Linder

Part III Cutaneous Procedures

- 9 Local Regional Anesthesia** 87
Peter M. Prendergast
- 10 Botulinum Toxins** 103
Peter M. Prendergast
- 11 Biostimulation and Biorestructuring of the Skin** 131
Maurizio Ceccarelli
- 12 Microdermabrasion** 145
Preeti H. Savardekar
- 13 Aesthetic Cryotherapy** 151
Michael H. Swann

14 Facial Peels	157
Niti Khunger	
15 Fractional Laser Resurfacing	179
Vic A. Narurkar	
16 Capacitive Radiofrequency Skin Rejuvenation	187
Manoj T. Abraham and Joseph J. Rousso	
17 The Use of Intense Pulsed Light (IPL) in Aesthetic Medicine	197
Bruce M. Freedman and Toral P. Balakrishnan	
18 Thermolysis in Aesthetic Medicine: 3D Rejuvenation	205
Nassim Tabatabai and Neil S. Sadick	
19 Neodym-Yag-Laser Treatment for Hemangiomas and Vascular Malformations	213
Thomas Hintringer	
20 Foam Sclerotherapy	221
Marcondes Figueiredo	
21 Facial Laser Hair Removal	235
Benjamin A. Bassichis	
22 Laser Treatment of Telangiectasias	241
Alia S. Brown and David J. Goldberg	
23 Mesotherapy	249
Narmada Bharia	
24 Mesotherapy Solutions for Inducing Lipolysis and Treating Cellulite	255
Benje Gutierrez and Frank L. Greenway	
25 Cellulite: Etiology, Classification, Pathology, and Treatment	265
Melvin A. Shiffman	
26 Dermaroller: The Transepidermal Delivery System	273
Madhuri Agarwal	
27 Scar Management	277
George John Bitar, Priscilla Patel, and Lauren Craig	
28 Arnica montana	289
Melvin A. Shiffman	

Part IV Shaping Face and Body

29 Augmentation with Injectable Fillers	297
Peter M. Prendergast	
30 Potential Risks and Complications of Injectable Alloplastic Facial Fillers	337
Melvin A. Shiffman	

31 Facial Augmentation with Autologous Fat	347
Melvin A. Shiffman	
32 Face and Neck Remodeling with Ultrasound-Assisted Lipoplasty (Vaser)	357
Alberto Di Giuseppe and George Commons	
33 Injection/Filler Rhinoplasty	371
George John Bitar, Olalesi Osunsade, and Anuradha Devabhaktuni	
34 Suture Lifting Techniques	391
Peter M. Prendergast	
35 Breast Augmentation with Hyaluronic Acid Filler	427
Peter M. Prendergast	
36 Cell-Assisted Lipotransfer for Breast Augmentation	445
Kotaro Yoshimura, Yuko Asano, Noriyuki Aoi	
37 Penile Enhancement Using Fillers	459
Hassan Kobas Khawaja and Enrique Hernandez-Perez	
38 Body Contouring with Ultrasound-Assisted Lipoplasty (VASER)	465
Peter M. Prendergast	
39 The Use of Low-Level Laser Therapy for Noninvasive Body Contouring	509
Robert F. Jackson and Ryan Maloney	
40 Ultrasound-Assisted Lipoplasty: Basic Physics, Tissue Interactions, and Related Results/Complications	519
William W. Cimino	
41 Medical Management Options for Hair Loss	529
Samuel M. Lam, Brian R. Hupstead, and Edwin F. WilliamsIII	
42 Hair Removal	537
Afshin Sadighha and Gita Meshkat Razavi	
43 Carboxytherapy in Aesthetic Medicine	547
Nina Koutná	
44 Emerging Technologies: Chemical Peels	577
Basil M. Hantash and Vishal Banthia	
45 Emerging Technologies: Laser Skin Resurfacing	587
Basil M. Hantash and Vishal Banthia	
46 Emerging Technologies: Nonablative Lasers and Lights	605
Basil M. Hantash and Vishal Banthia	
47 Emerging Technologies in Aesthetic Medicine: Nonablative Skin Tightening	617
Basil M. Hantash	
Index	627

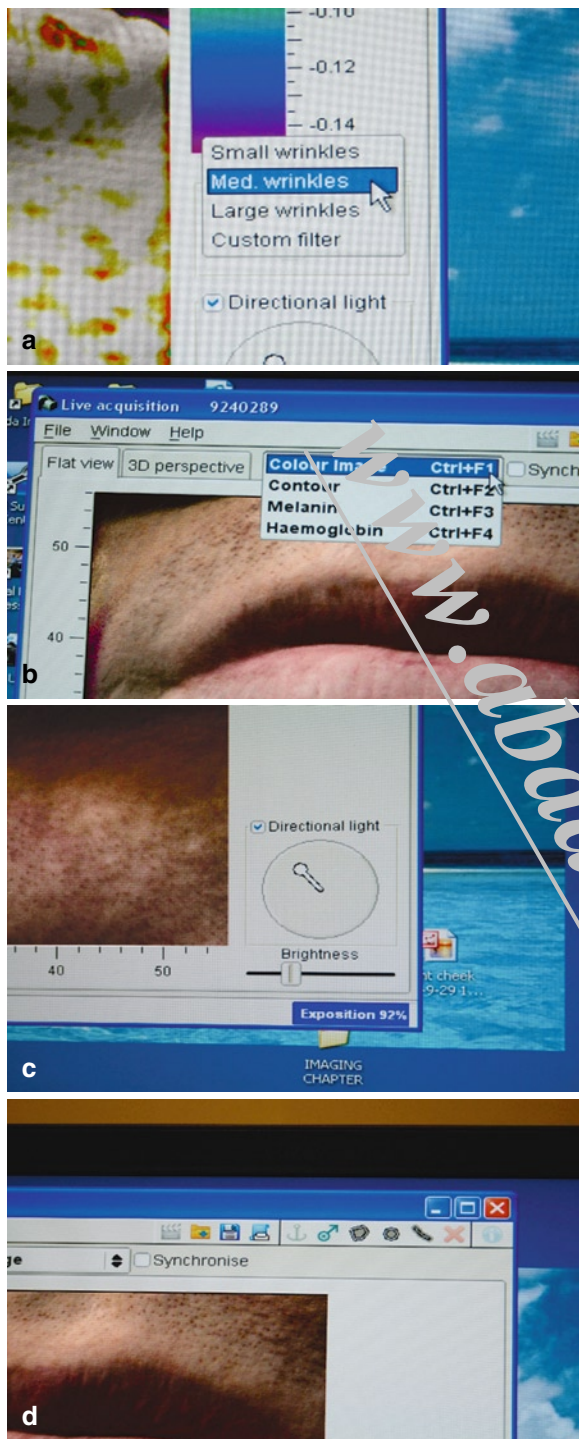


Fig. 7.4 The user-friendly Antera 3D interface. (a) Filters for small, medium, and large wrinkles. (b) Main selection panel for normal color image, contour (topography), melanin, and hemoglobin. (c) Directional light tool. (d) Main controls for selecting an area for quantitative evaluation, matching before-and-after images, creating a report, and saving an image

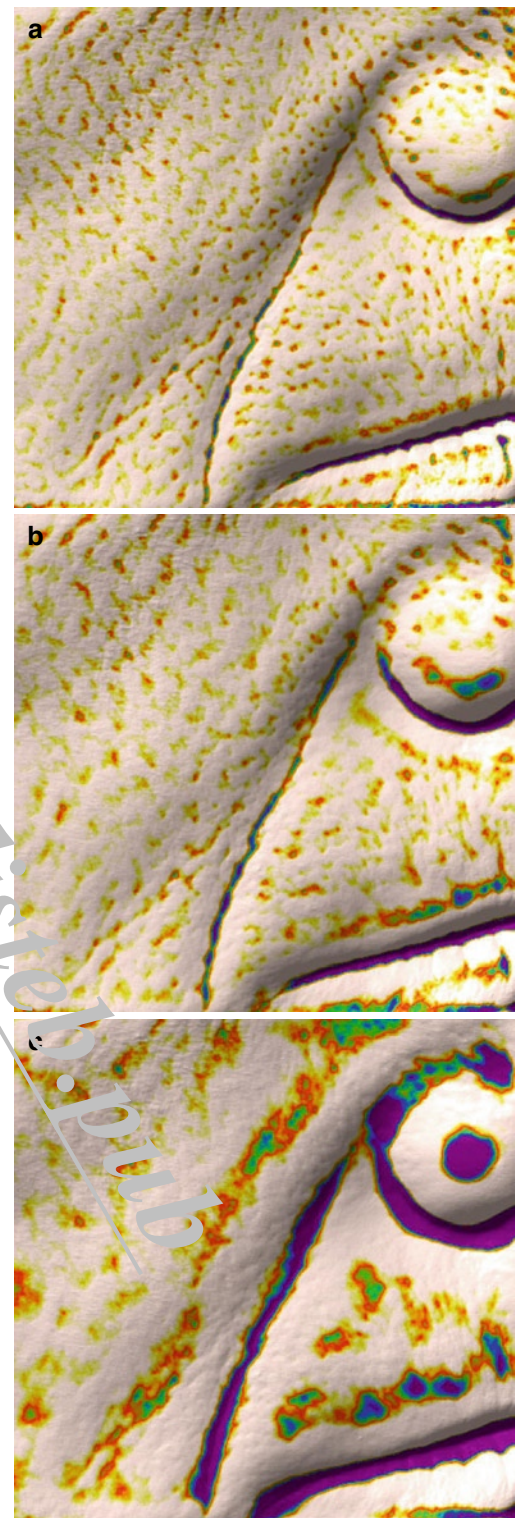


Fig. 7.5 Filters for contour analysis. (a) Small wrinkles. This highlights superficial rhytids and skin texture as well as pores and acne scarring. (b) Medium wrinkles. This filter is useful to show deeper lines such as nasolabial folds. (c) The large wrinkle filter is more appropriate to visualize facial contours and volume loss

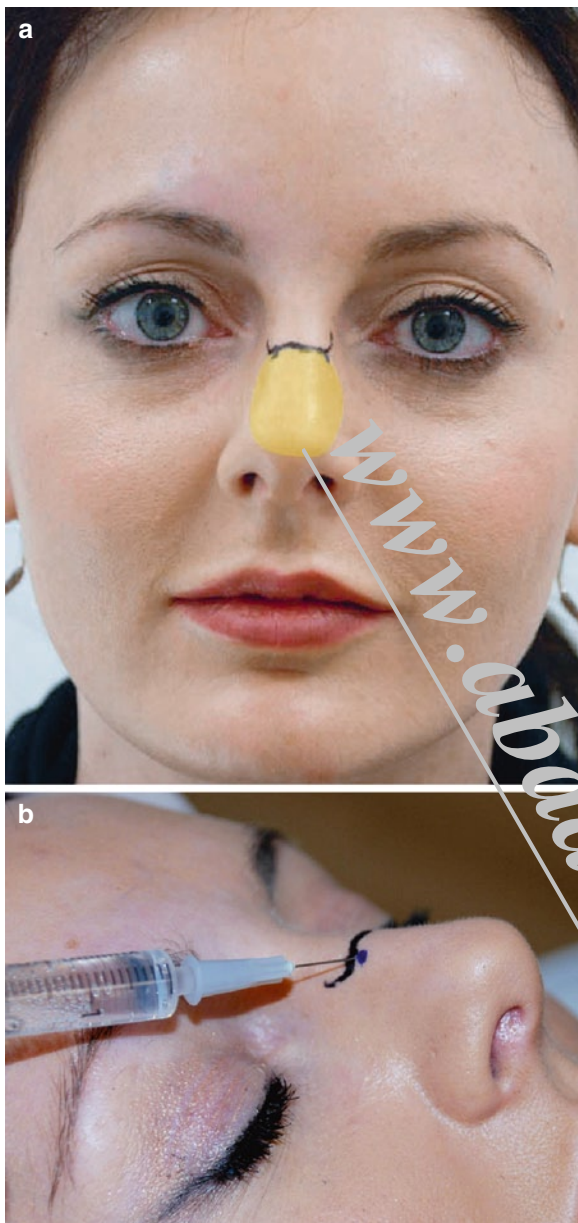


Fig. 9.5 Dorsal nasal nerve block. (a) Location of nerve (*dot*) on either side of the midline as it emerges from underneath the nasalis muscle and supplies the tip of the nose (*shaded*). (b) The nerve block is performed by injecting at the junction of the nasal bone and cartilage on either side of the midline

chin. Occasionally, a branch of the mylohyoid nerve innervates the central chin pad. To block the mental nerve, 1 ml of anesthetic is injected just under the mucosa between the premolars or around the nerve fibers if they are visible. Reaching the nerve percutaneously is also

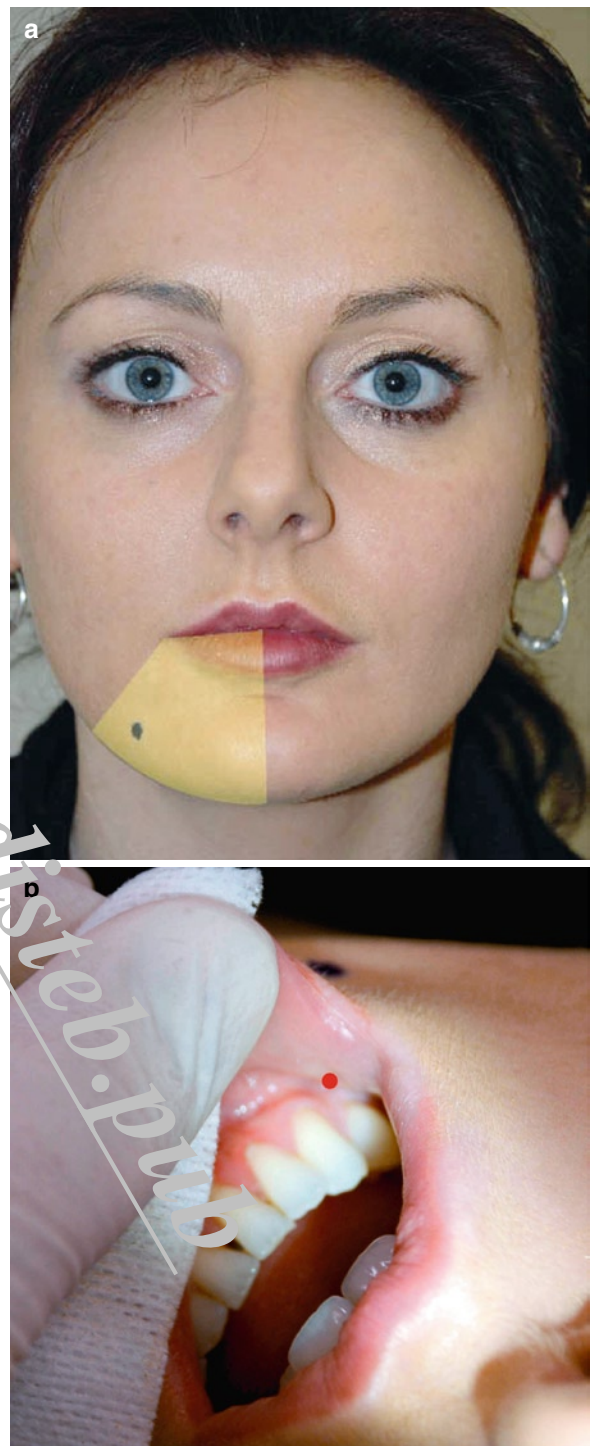


Fig. 9.6 Mental nerve block. (a) Nerve location (*dot*) as it emerges from its foramen on the mandible and area of the chin and lower lip it innervates (*shaded*). (b) The nerve is approached intraorally by injecting under the mucosa at the root of the second premolar tooth

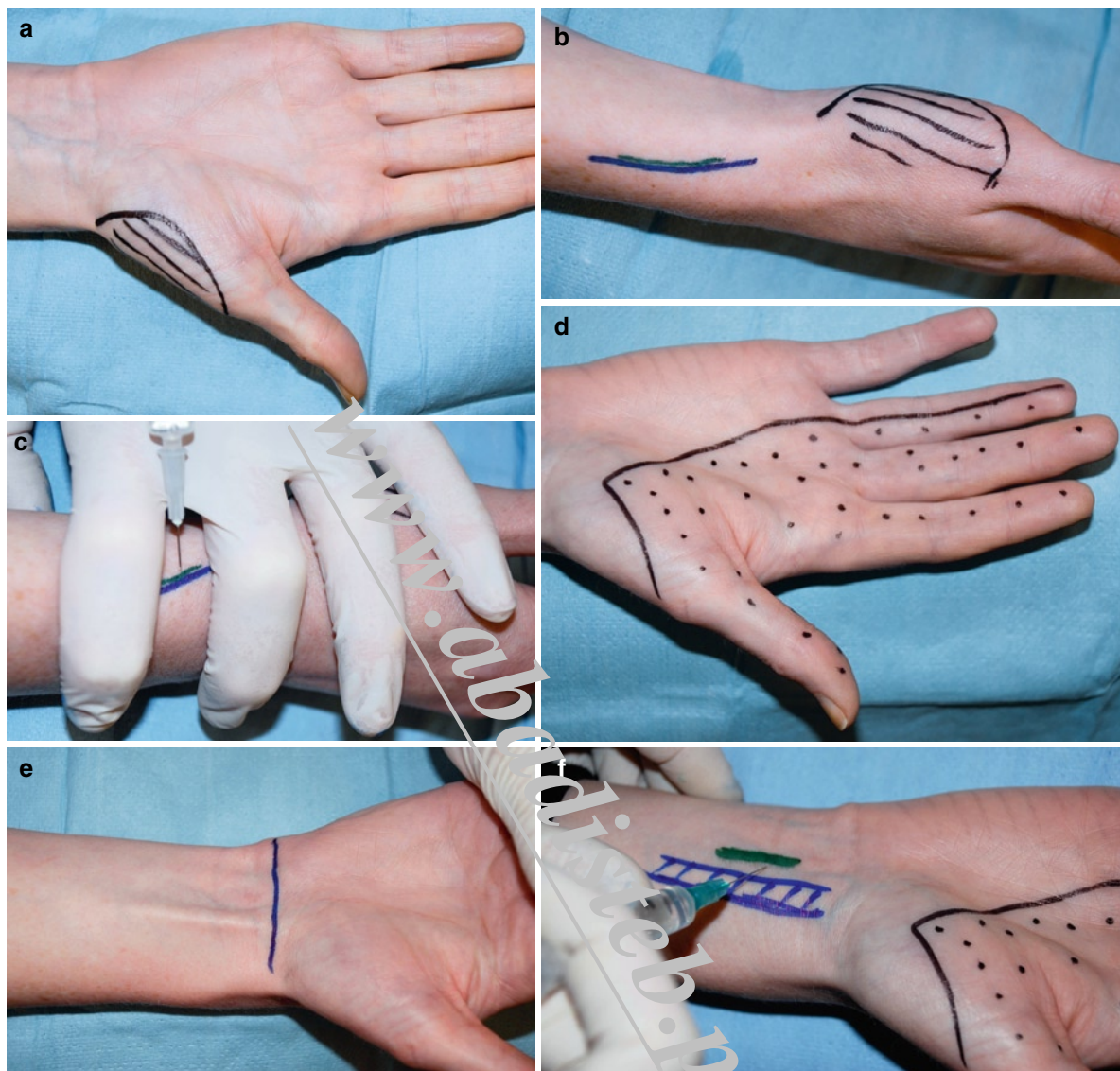


Fig. 9.12 Wrist block. This requires blocks of the radial, median, and ulnar nerves. (a) Area on the palm innervated by the radial nerve. (b) The radial nerve (*green*) lies adjacent to the cephalic vein (*blue*) on the radial side of the forearm and can sometimes be felt if it is rolled against the underlying bone. (c) The non-injecting hand traps the nerve between two fingers proximal to the anatomical snuff box as the injection is made on the other hand. (d) Palmar surface innervated by the median nerve. (e) The visible flexor carpi radialis proximal to the wrist crease (marked) as the wrist is flexed against resistance. The palmaris longus tendon is absent in this patient (as it is in 10% of the population). When present, the median nerve is located deep to the palmaris longus tendon. If the tendon is absent, the nerve can be predicted to lie on the ulnar side of the flexor carpi radialis.

(f) The block is made 3 cm proximal to the wrist crease by injecting 1 cm deep after aspirating. (g) In this patient, the palmaris longus tendon is clearly visible when the thumb is opposed. In 90% of the population, where the tendon is present, the median nerve is found deep to the tendon 3 cm proximal to the wrist crease where it can be blocked by passing a needle at 45° about 1 cm under the tendon. (h) A palmar cutaneous branch of the median nerve (*green*) arises up to 10 cm proximal to the wrist crease and supplies an area on the proximal part of the palm (*shaded*). This nerve is blocked by injecting 3 mL subcutaneously over the site of the median nerve. (i) Sensory innervation of the ulnar nerve on the palm. (j) The nerve is blocked by injecting 3 cm proximal to the wrist crease, deep to and slightly radial to the flexor carpi ulnaris tendon.

Fig. 16.2 Schematic indicating three-dimensional volumetric tightening of the dermis. Tightening of the fibrous septae in the subcutaneous tissue helps contour in the Z plane (Graphic courtesy of the manufacturer)

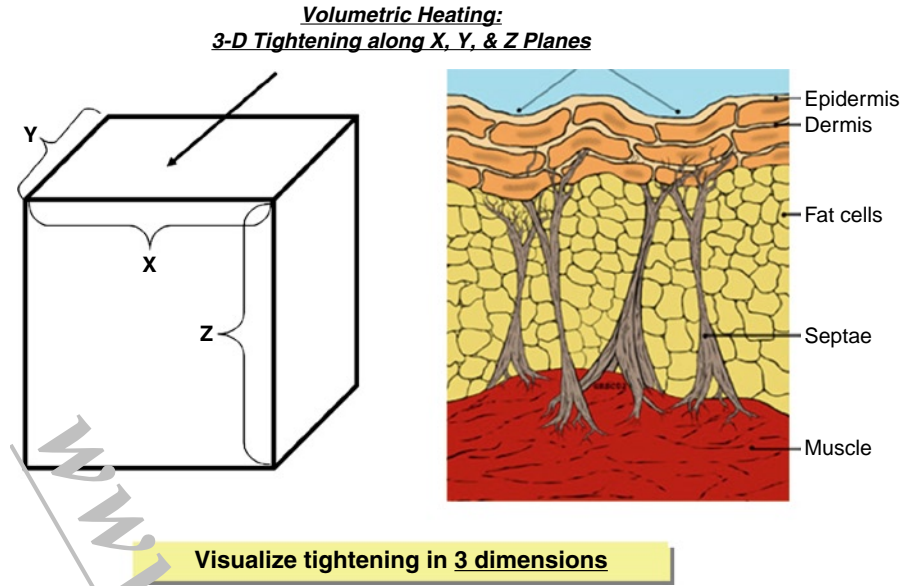
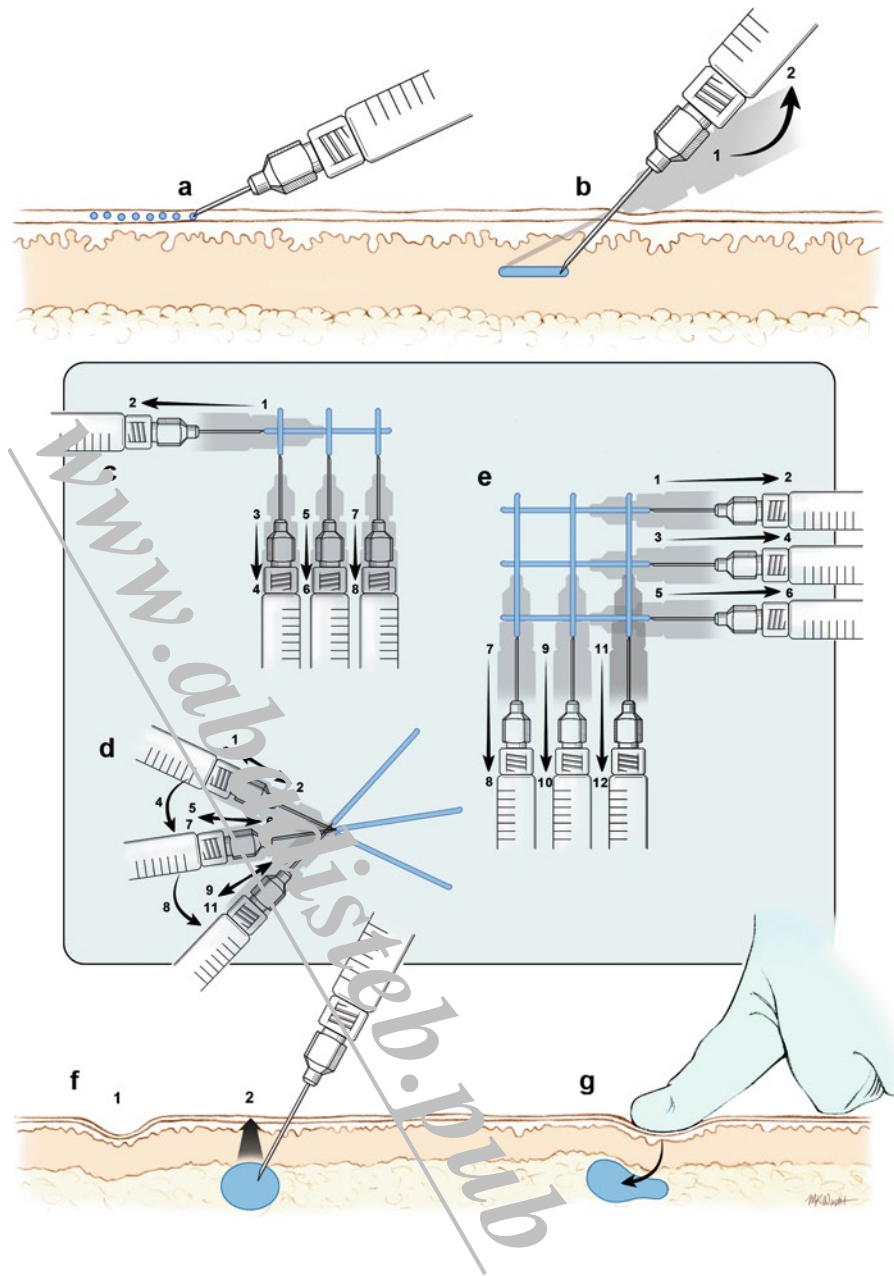


Fig. 16.3 Computer graphic depicting treatment algorithm for the upper face

Fig. 29.9 Techniques for filler injections.

(a) Superficial droplet.
(b) Linear retrograde threading.
(c) Perpendicular buttress.
(d) Fanning.
(e) Cross-hatching.
(f) Depot.
(g) Push technique



4. Fanning

The needle is inserted, often to the hilt, and filler is injected during withdrawal as in linear retrograde threading. However, before the needle tip exits the skin, it is redirected so that further product is placed next to the first thread. The maneuver is repeated, through the same needle puncture, until a fan or triangular-shaped layer of filler is laid down. The fanning technique is usually employed at the

superior part of the nasolabial fold beside the nasal alae, at the oral commissures, and in the cheeks.

5. Cross-Hatching

A grid-like pattern of filler is placed through multiple injection points so that the first series of threads lie parallel to one another. A second series of threads is then placed perpendicular to the first threads. This technique provides structural support to an anatomic area and builds up volume over features, such

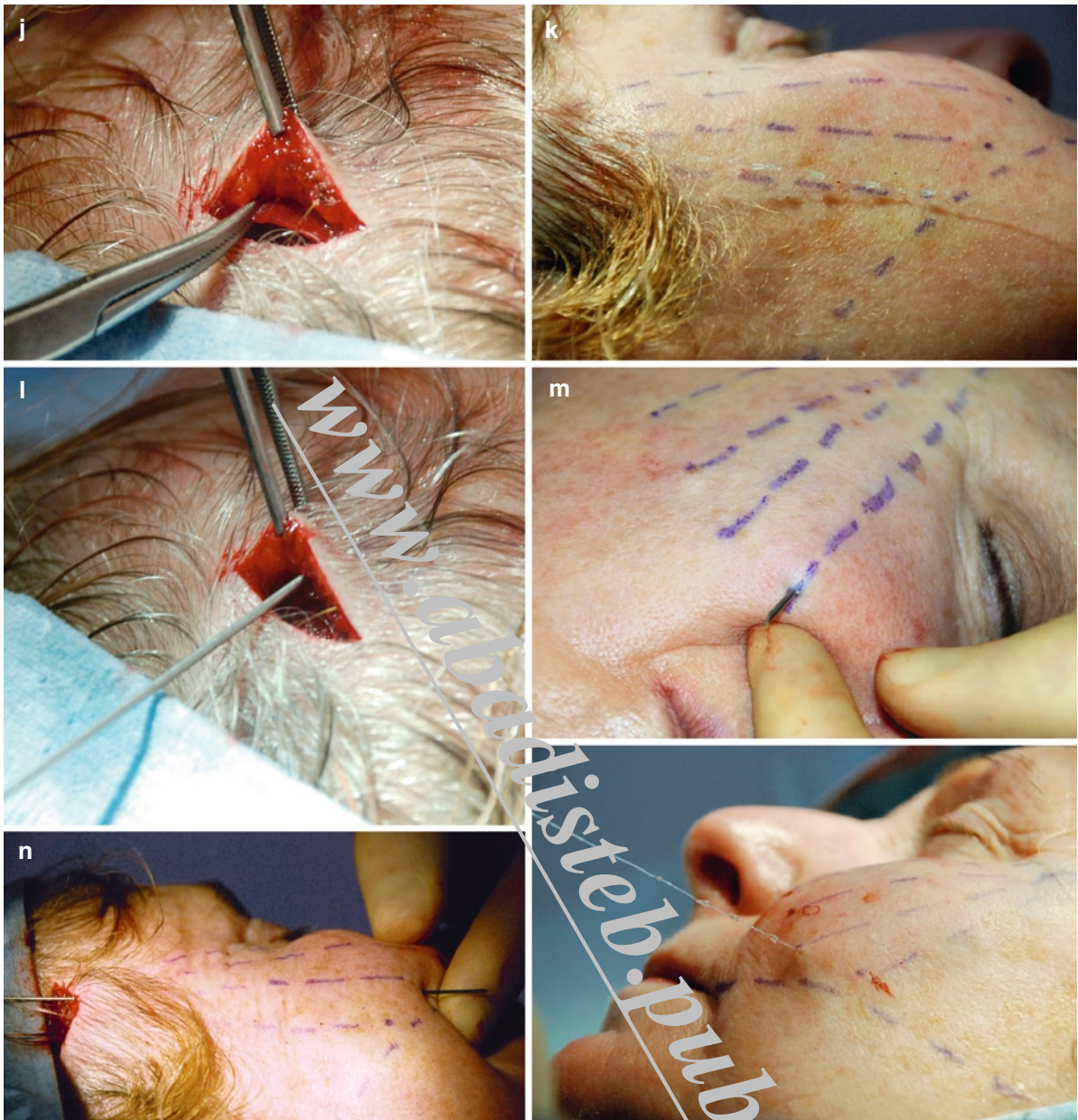


Fig. 34.14 (continued)



Fig. 35.10 (continued)