

Contents

Videos	ix
Foreword	x
Preface	xi
1 Facial Assessment	1
Introduction	2
Cephalometry	2
Proportions	2
Golden Ratio	2
Male and Female Face Formats	3
Facial Biotypes	3
Mandibular Profile	3
Conclusion	3
References	3
2 Anatomy of the Face	15
Fat Pads	16
Periorbital Fat Pads	16
Superficial Fat Pads	16
Deep Fat Pads	16
Fat Pads of the Middle Third of the Face	16
Temporolateral Fat Pad	16
Jowl Fat	16
Fat Pad of the Lips	16
Buccal Fat Pad (Bichat's Fat Pad)	17
Vascularization	17
Sensory and Motor Innervation	18
Trigeminal Nerve	18
Facial Nerve	18
References	18
3 Biophysical Properties of Hyaluronic Acid	95
Introduction	96
Physical and Chemical Characteristics	96
Molecular Weight and Concentration	96
Crosslinking	96
Viscoelasticity	96
Swelling	97
Particle Size and Extrusion Force	97
Types of Filler	97
Choice of Product	97
Biological Effect	97
Conclusion	97
References	97
4 Anatomy of the Aging Process	101
Introduction	102
Bone Alterations—Remodeling of the Cranial Skeleton	102
Periorbital Region	102
Middle Third of the Face	102
Piriform Aperture	102
Lower Third of the Face	103
Fat Pads	103
Muscles	103
“Concertina” Effect	103
Conclusion	103
References	103

5	Anesthetic Block	113
	Introduction	114
	Anatomical Structure of the Facial Foramens	114
	Supraorbital Nerve	114
	Supratrochlear Nerve	114
	Infraorbital Nerve	114
	Mental Nerve	114
	References	114
6	Filler Injection of the Temporal Region	135
	Introduction	136
	Anatomy	136
	Technique	136
	Superficial Technique	136
	Deep Technique	137
	Complications	137
	References	137
7	Filler Injection of the Eyebrows	171
	Introduction	172
	Techniques	172
	Superficial Technique Using a Needle	172
	Deep Technique Using a Needle	172
	Cannula Technique	172
	Region Below the Eyebrow	172
	References	172
8	Filler Injection of the Forehead	199
	Introduction	200
	Anatomy	200
	Technique	200
	Technique with Cannula Superficial to the Muscular Layer	200
	Technique with Cannula Deep to the Muscular Layer	200
	Technique with Supraperiosteal Needle	200
	Technique with Intradermal Needle	200
	Clinical Cases	200
	Complications	200
	References	200
9	Filler Injection of the Glabella	229
	Introduction	230
	Anatomy	230
	Intradermal Technique	230
	Supraperiosteal Technique	230
	Complications	230
	References	230
10	Filler Injection of the Malar and Zygomatic Regions	249
	Introduction	250
	Anatomy	250
	Fat Pads	250
	Vascularization	250
	Innervation	250
	Sensory	250
	Motor	250
	Malar Fold	250
	Technique	251
	Superficial Cannula Technique for the Malar Region	251
	Superficial Needle Technique for the Malar Region	251
	Deep Needle Technique for the Malar Region	251
	Deep Cannula Technique for the Malar Region	251
	Needle Technique for the Cheekbone Area	251
	Cannula Technique for the Cheekbone Area	251
	Complications	251
	Conclusion	251
	References	251

11	Filler Injection of the Nasojugal Groove and Palpebromalar Groove	291
	Introduction	292
	Anatomy	292
	Vascularization	292
	Technique	292
	Nasojugal Groove	293
	Palpebromalar Groove	293
	Clinical Cases	293
	Complications	293
	References	293
12	Filler Injection of the Nasolabial Fold	321
	Introduction	322
	Anatomy	322
	Technique	322
	Technique with Intradermal Needle	322
	Technique with Supraperiosteal Needle	322
	Technique with Subcutaneous Cannula	322
	Complications	322
	References	322
13	Filler Injection of the Submalar Triangle	345
	Introduction	346
	Anatomy	346
	Technique	346
	Submalar Technique with Cannula in the Deep Plane	346
	Submalar Technique with Cannula in the Superficial Plane	346
	Submalar Technique with Needle in the Superficial Plane	346
	References	346
14	Filler Injection of the Nose	365
	Introduction	366
	Anatomy	366
	Structure	366
	Vascularization	366
	Innervation	366
	Topography	366
	Angles	366
	Ethnic Variations	367
	Aging	367
	Technique	367
	Nasofrontal Angle and Nasal Dorsum	367
	Proximal Cartilage	367
	Distal Cartilage	367
	Nasolabial Angle, Columella, and Tip of the Nose	367
	Piriform Sinus	367
	Clinical Cases	367
	Complications	367
	Conclusion	367
	References	368
15	Filler Injection of the Preauricular Region and the Earlobe	399
	Introduction	400
	Anatomy	400
	Technique	400
	Preauricular Technique with Cannula	400
	Preauricular Technique with Needle	400
	Technique for the Earlobe with Needle	400
	Technique for the Earlobe with Cannula	400
	References	400

16	Filler Injection of the Lips, Oral Commissure, and Mentolabial Sulcus	415
	Lips	416
	Introduction	416
	Anatomy	416
	Application Technique	416
	Complications	416
	Oral Commissure and Mentolabial Sulcus	417
	Introduction	417
	Technique	417
	References	417
17	Filler Injection of the Chin and Mandible Contour	459
	Introduction	460
	Anatomy	460
	Technique	460
	Filler Injection of the Mandibular Angle and Mandibular Ramus	461
	Redefining the Mandibular Line	461
	Lateral Mental Region	461
	Chin	461
	Mentolabial Sulcus	461
	Clinical Cases	461
	References	462
18	Complications and Adverse Effects	535
	Introduction	536
	Echymosis	536
	Edema	536
	Immediate Edema	536
	Antibody-mediated Edema (Angioedema)	536
	Nonantibody-mediated Edema (Delayed Onset)	536
	Edema Due to Congestion	536
	Erythema	536
	Infection	536
	Nodules	536
	Noninflammatory Nodules	536
	Inflammatory Nodules	537
	Paresthesia	537
	Vascular Impairment	537
	Occlusion of the Retinal Artery	538
	Hyaluronidase	538
	Technical Complications	539
	Tyndall Effect	539
	References	539
19	Risk Areas	547
	Introduction	548
	Anatomical Areas at Risk	548
	Frontal Region	548
	Glabella	548
	Nasal Dorsum	548
	Nasolabial Fold	548
	Nasojugal Groove and Malar Region	548
	Temples	549
	Zygomatic Region	549
	Lower Third	549
	Conclusion	549
	References	549
	Index	559