

Table of Contents

The Authors	IV	5.5 Treatment Planning	82
Preface	V	5.6 Informed Consent	89
Acknowledgements	VII	5.7 Documentation	
Abbreviations and Symbols	XI	6 Treatment	
1 The Skin	1	6.1 Pre-treatment Consultation	
1.1 Structure and Function of the Skin	2	6.2 Treatment Setting	
1.2 Skin Ageing	11	6.3 Patient Positioning and Draping	
2 Facial Anatomy and Ageing	23	6.4 Ergonomics	
2.1 The Face and Attractiveness	24	6.5 Accessories	
2.2 Anatomical Structures of the Face	29	6.6 Needles and Cannulas	96
2.3 Mechanisms of Facial Ageing and Their Clinical Consequences	44	6.7 Assisted Injection Systems	98
2.4 Summary and Treatment Implications ..	53	6.8 Anaesthetic Methods	99
3 Injectable Fillers	55	6.9 Injection Techniques and Effects	102
3.1 Introduction	56	6.10 Complications and Their Management	118
3.2 Filler Types	57	6.11 Post-treatment Advice	121
3.3 'Filler Navigator'	60	7 Regional Applications	123
4 Medical Photography	73	7.1 Global Approach	124
4.1 General Requirements for Medical Photography	74	7.2 Forehead Region	133
4.2 Photographic Documentation	74	7.3 Periorbital Region	150
4.3 Three-dimensional (3D) Photography ..	77	7.4 Midface	170
5 Consultation	83	7.5 Perioral Complex	188
5.1 Basics	84	7.6 Special Indications	218
5.2 Clarifying Expectations	84	8 Case Studies	231
5.3 History Taking and Examination	85	9 Aids for the Practitioner	257
5.4 Objectification and Evaluation	91	9.1 Documentation Form	258
		9.2 Aesthetic Scales at Rest (by Merz)	259

Table of Contents

10 Appendix	269	10.4 Image Sources	270
10.1 Overview of Filler Products and Their Manufacturers	270	10.6 List of Videos	271
10.2 Addresses of the Manufacturers	270	10.7 References	274
10.3 Manufacturer Directory	270	10.8 Index	275

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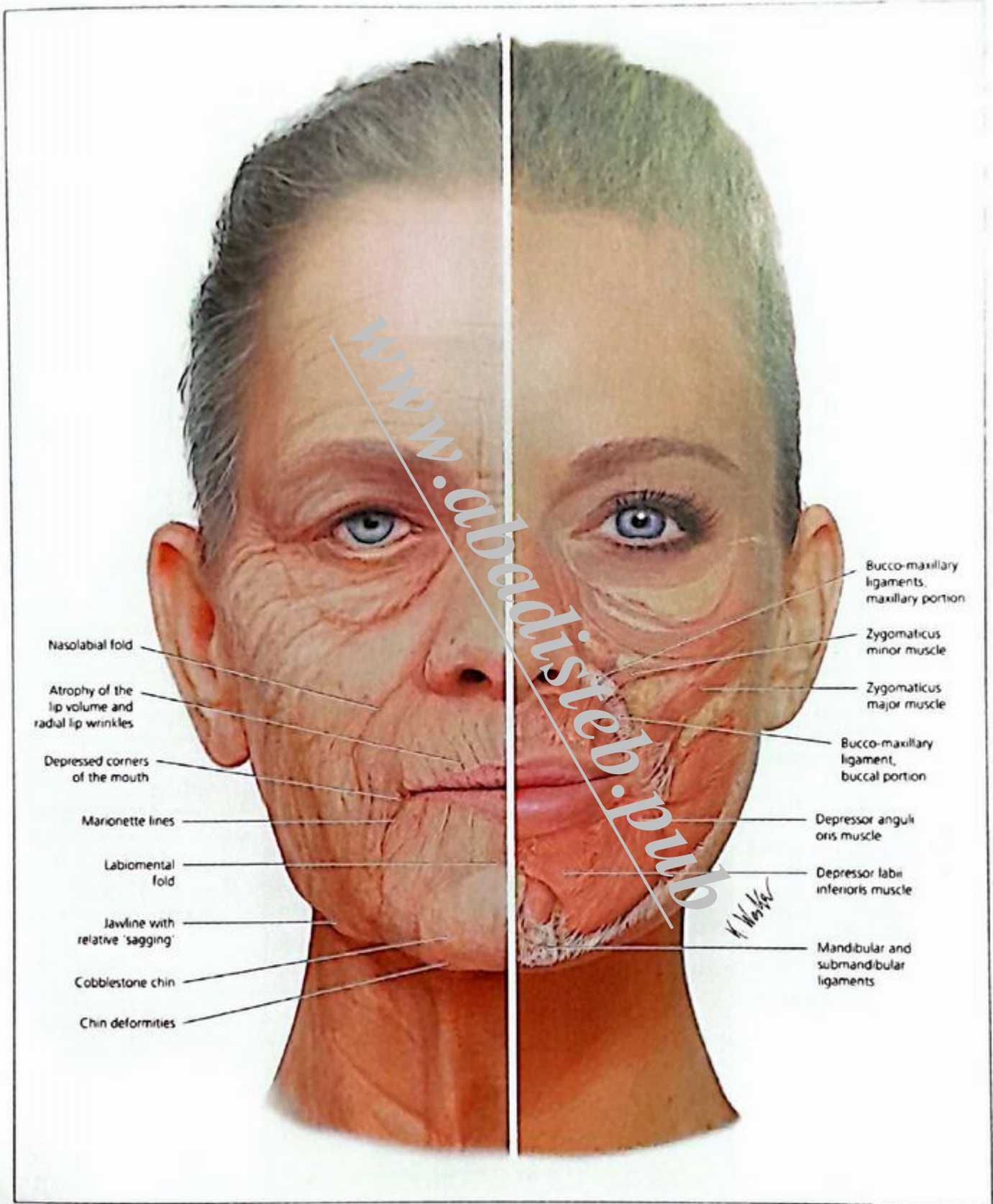
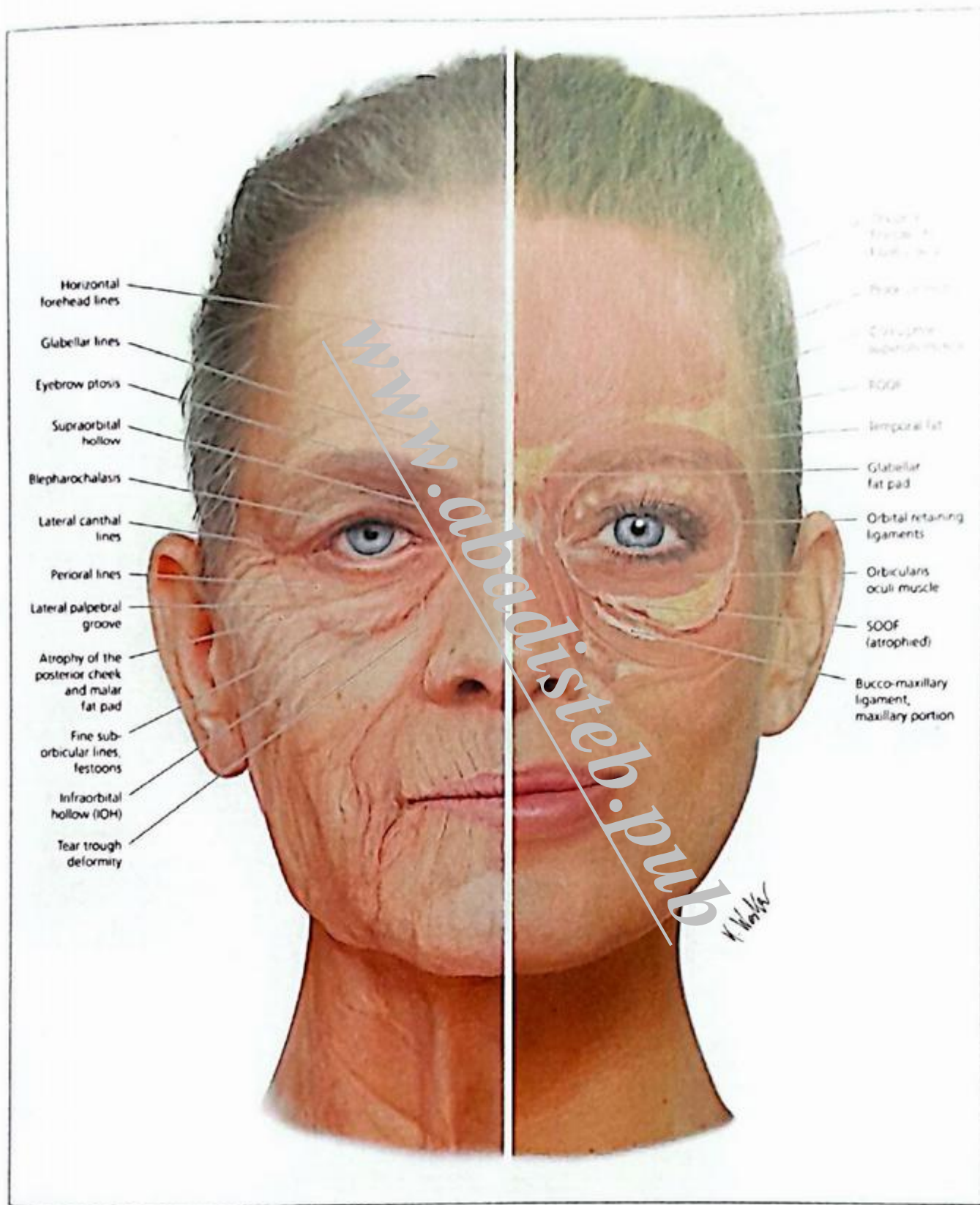


Fig. 2.27 Split view of the clinical signs of ageing and the anatomical structures in the perioral region.



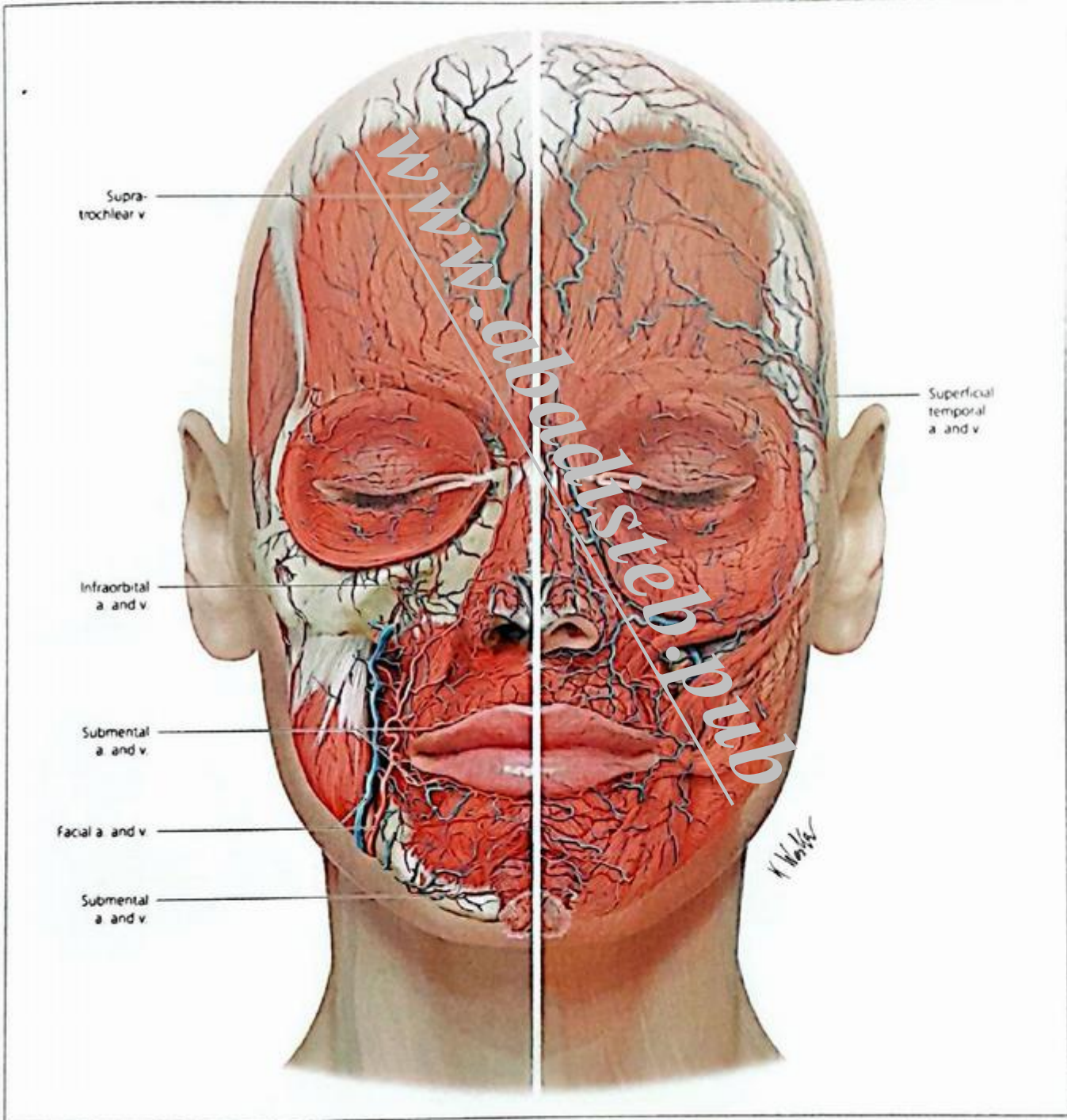
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Fig. 2.25 Split view of the clinical signs of ageing and anatomical structures in the periorbital region.

Because of the biological support function of the subcutaneous fat, an adequate blood supply to the subcutaneous fat is of critical importance for the maintenance of the fluid balance (volume) and the trophic condition of the overall soft tissue complex of the face (Fig. 2.20). In the young face, the subcutaneous soft tissues are well supplied with blood, however, a decrease in blood supply occurs at a

relatively early age, and is accelerated by factors such as smoking. This results in two initial features of ageing, namely:

1. Facial volume loss due to atrophy
2. Deterioration in the supply of fluid, oxygen and nutrients to the skin.



2

Fig. 2.20 Position of the facial arteries and veins relative to that of the moderately deep (right side) and superficial muscles (left side) (a = artery, v = vein)

2.2.3 Muscles of facial expression

The muscles of facial expression are mostly superficial muscles that lie just under the skin. Hence, they are also referred to as the 'skin muscles'. Dynamic wrinkles form due to the contraction of these

muscles during the expression of emotions (Fig. 2.12). With age, these muscles tend to become hypertrophic, resulting in the development of persistently visible wrinkles that are involuntary and undesirable.

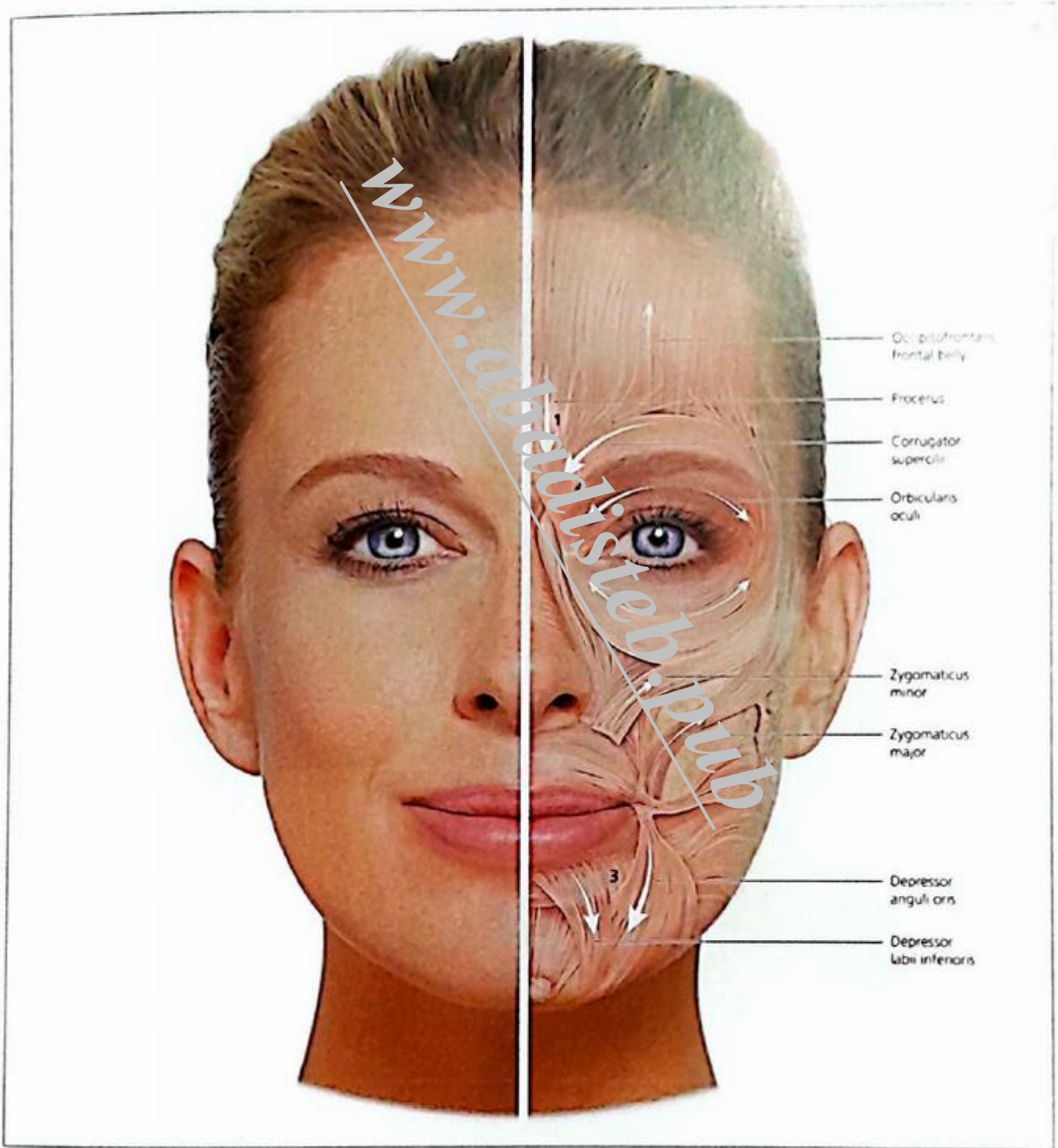


Fig. 2.12 Overview of the muscles of facial expression and schematic representation of the contraction forces (arrows) involved in the facial expression of emotion. An increase in depressor muscle activity (1, 2, 3) and a decrease in elevator muscle activity generally occurs with age.

Clinical course of facial ageing



Fig. 2.3 Face at the age of 15 years.



Fig. 2.4 Face at the age of 25 years.

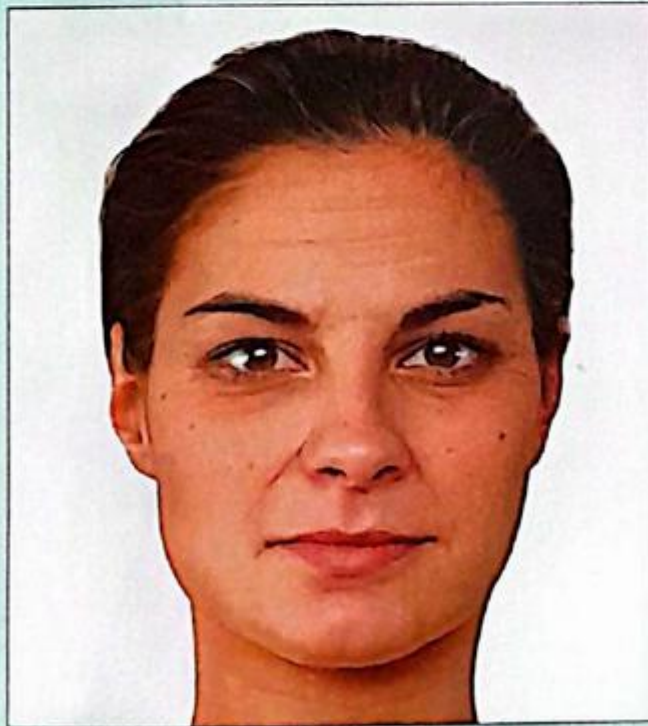


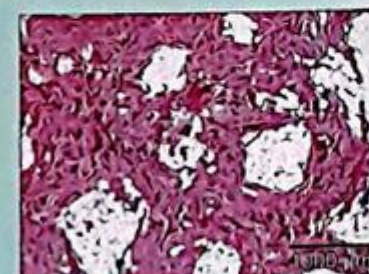


Fig. 2.5 Face at the age of 45 years.



Fig. 2.6 Face at the age of 65 years.

Clinical appearance of intrinsically aged skin		
	<p>Epidermis/dermis</p>	<p>Thin, rough, non-elastic, transparent skin with fine lines</p> <ul style="list-style-type: none"> • Decreasing barrier function • Reduced integumental reactivity • Increased vulnerability
	<p>Hair pigmentation</p>	<p>Loss of hair pigmentation</p> <ul style="list-style-type: none"> • Appearance: grey hair • Pigment shifts on hairless skin
	<p>Blood vessels</p>	<p>Regression, involution and disorganisation of the vascular plexuses</p> <ul style="list-style-type: none"> • Impaired thermoregulatory function • Sugillations, ecchymoses, purpura • Haemangiomas
	<p>Appendages</p>	<p>Regression, involution and disorganisation of the appendages</p> <ul style="list-style-type: none"> • Reduction in sebum and sweat production <ul style="list-style-type: none"> – seborrhoea, pruritus – impaired thermoregulatory function • Loss of hair pigmentation, reduction in hair number; proliferation of vellus hairs • Thinning of the nail plate, roughness of the nail surface, formation of ridges • Reduction in nervous stimulability
	<p>Subcutaneous tissue</p>	<p>Regression, involution and disorganisation of the subcutaneous tissue</p> <ul style="list-style-type: none"> • Reduction in fatty tissue • Osteoporosis of the underlying bone layers leads to sagging skin folds (e.g. jowling)

1

Tab. 1.1 Clinical appearance of intrinsically aged skin.