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Botulinum toxin injection works well and reliably in crow's feet, glabella, and forehead.

With experience, the eyebrows may be repositioned through treatment of the adjacent orbicularis oculi, procerus, corrugator supercilii, and depressor supercilii.

Dose is often individualized and may be related to muscle mass such that relatively

smaller doses are sometimes used in females and Asians (Table 116.1).

Glogau wrinkle classification scale (Fig. 116.1):

- Type I: no wrinkles
- Type II: wrinkles in motion
- Type III: wrinkles at rest
- Type IV: only wrinkles

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Table 116.1 General guidelines for typical botulinum toxin cosmetic doses

Site	Dose per site (units)	No. of injections/ side	Total dose per side (units)	Spacing of ipsilateral injection (cm)	Recommended initial dose (units) per side/no. injection sites per side/distance between injections (cm)
Forehead	2.5–5	2–5	10–15	1–3	2.5/2/3
Glabella	5–10	1–2	10–20	1–2	5/2/1+
Crow's feet	3–10	1–5	10–15	1–2.5	5/2/1+
Upper lip	1–1.5	1–2	1–2	1.5	1/1/na
Lower lip	1–1.5	1–2	1–2	1.5	1/1/na
Lateral commissure	5–10	1–2	5–10	1–1.5	5/1/na
Platysma	5	Variable	15–50+	1–3	5/variable/1.5+

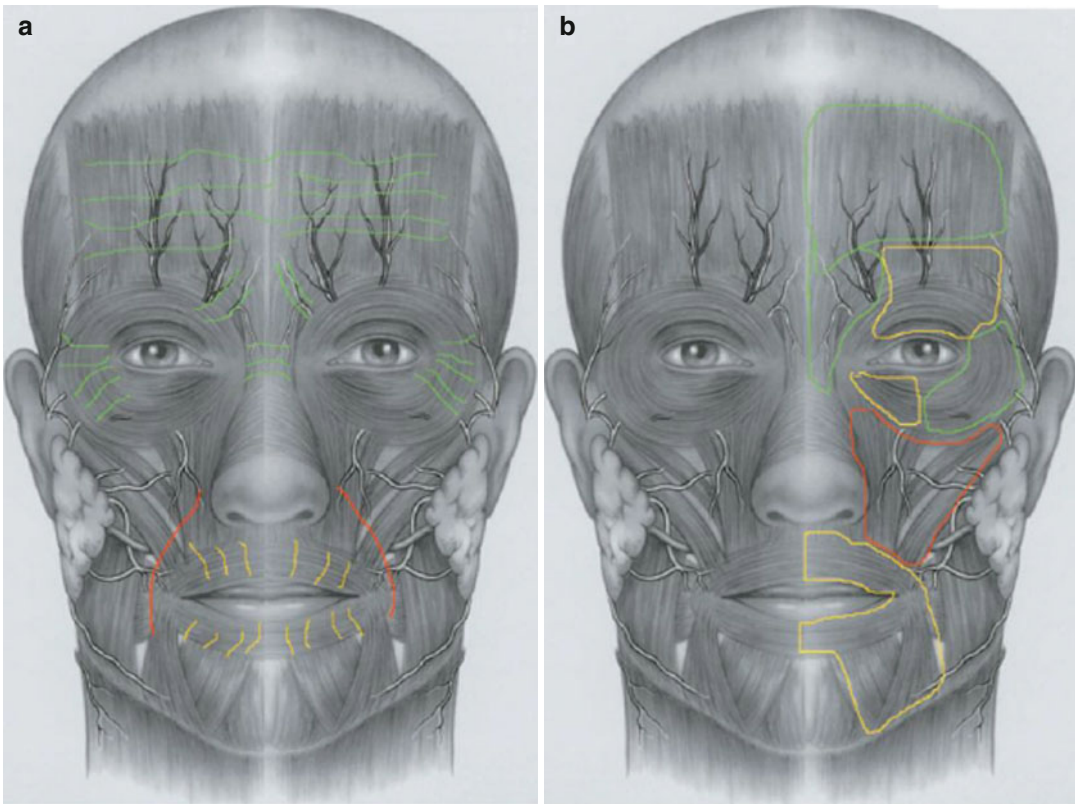


Fig. 116.1 (a) Wrinkles indicated for botulinum toxin treatment: *green*, wrinkles that respond well; *yellow*, wrinkles that should be treated cautiously; and *red*, lines that should not be treated. (b) Facial zones and underlying muscle groups. *Green areas* respond predictably and well.

Caution is used in *yellow areas* because of unwanted effects such as a dynamic and ptotic eyebrow. *Red areas* will produce unwanted effects such as drooping cheek and mouth