Introduction to Botulinum Toxin 113

John R. Burroughs and Richard L. Anderson

OnabotulinumtoxinA (e.g., Botox®) interferes with acetylcholine release from nerve terminals causing temporary paralysis of the injected muscles. The pioneering work of ophthalmologists Scott et al. over 25 years ago was for strabismus. In 1989, it was approved for blepharospasm, hemifacial spasm, torticollis, and strabismus (Scott 2004). Since then, it has been approved for cosmetic treatment of the glabellar furrows, primary axillary hyperhidrosis, and migraine headaches. Botox® has become the number one cosmetic procedure and is widely used to treat rhytids of the glabella; forehead; eyelids; and nasal, cervical, and perioral areas. Off-label oculofacial uses include: hyperkinetic wrinkles of the face, hyperlacrimation, eyelid retraction, spastic entropion, blepharoptosis, muscle-tension (stress) headaches, digital Raynaud's syndrome findings, and improving symmetry for facial palsy. Since the FDA approval of onabotulinumtoxinA, several other serotypes have been approved. In general, their adoption has been more limited due to dosing conversion requirements and slightly different performance characteristics. However, Xeomin® incobotulinumtoxinA does not require refrigeration until reconstitution is performed and doses similarly to Botox®. Zinc/phytase combination may improve effect/longevity particularly in elderly functional patients, which might be considered in these patients that have always had or start showing diminished effect or duration (Koshy et al. 2012).

References

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J.R. Burroughs, MD, PC (✉)
Colorado Springs, CO, USA
e-mail: john@drjohnburroughs.com

R.L. Anderson, MD, FACS
AO Surgical Arts,
Salt Lake City, UT, USA

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