Treatment Considerations for the Prevention of Botulinum Neurotoxin A Resistance

Repeated injections of Botulinum neurotoxin A (BoNT-A), a widely used aesthetic treatment, can result in the generation of neutralizing antibodies (NAb)...

...with subsequent immunoresistance and secondary non-response (SNR)

However, the true extent and impact of NAb-related SNR in aesthetic practice are unclear

Aesthetic practitioners should consider the impact of immunoresistance following BoNT-A treatment and adopt a collaborative patient-centered approach to minimize potential risks

Aesthetic Council for Ethical use of Neurotoxin Delivery [ASCEND]

- An international multidisciplinary panel of experts
- Review of published literature, systematic reviews (SRs), clinical studies, and case reports
- Identification of 13 cases of NAb-related SNR due to aesthetic use that were missed by SRs
- Assessment of consensus on clinical, ethical, and aesthetic considerations

Prevention of NAb-related immunoresistance

- Underestimation of BoNT-A immunoresistance due to limitations of published SRs and variability in treatment patterns
- Increased off-label use of higher BoNT-A doses is associated with a higher risk of developing SNR
- NAb-related SNR development might affect future therapeutic use of BoNT-A

Aesthetic practitioners should consider the impact of immunoresistance following BoNT-A treatment and adopt a collaborative patient-centered approach to minimize potential risks

Emerging Trends in Botulinum Neurotoxin A Resistance: An International Multidisciplinary Review and Consensus
Ho et al. (2022)