

EDUCATIONAL SYSTEM THAT HAS REDUCED THE INCIDENCE OF ADVERSE EVENTS CAUSED BY BOTULINUM TOXIN INJECTION: STUDY FROM 2,048,232 CASES IN A LARGE MULTICENTER

ATSUSHI HAYASHI - SHONAN BEAUTY CLINIC, TOKYO, JAPAN

BACKGROUND

Our facilities have approximately 500 physicians and operate about 250 clinics in Japan and abroad. Since reducing the incidence of adverse events is one of the key challenges in our large multicenter, we have introduced various educational systems regarding botulinum toxin injections since 2020. Such large multicenter is rare in the world, and there have been no previous studies that have examined the effectiveness in practice of the educational systems implemented there.

OBJECTIVES

The aim of this study was to investigate how the educational system for botulinum toxin injections introduced at our facility affected the incidence of adverse events.

METHODS

The educational system for botulinum toxin injection introduced at our facilities consists of lectures for knowledge acquisition, drawing of facial anatomy, testing of such knowledge, injection training using facial anatomy manikins, and testing of such injection techniques. As an indicator of the effectiveness of this educational system, the incidence of adverse events, including unsatisfactory results and complications, was studied retrospectively for 2,048,232 cases of botulinum toxin injection from 2019 to 2024.

RESULTS

The incidence of adverse events was 4.40% (n=6,434/146,369) in 2019, 3.69% (n=6,504/176,381) in 2020, 3.36% (n=8,876/264,055) in 2021, 2.90% (n=10,641/366,938) in 2022, 2.50% (n=12,335/493,912) in 2023 and 2.30% (n=13,785/600,577) in 2024.

CONCLUSION

The educational system for botulinum toxin injection introduced at our facilities was considered to have contributed to a decrease in the incidence of adverse events. This study indicated the effectiveness of education and the possibility that this educational system could be applied at other facilities.