Background: Keloids are benign fibrous overgrowths of scar tissue, which results from an abnormal wound healing. Many therapies have been used to treat keloid, but in most cases remain unsatisfactory. One of the new treatments is injecting Botulinum toxin type A (BTX-A) in the lesion. Botulinum toxin type A immobilizes the local muscles, reduces skin tension, decreases microtrauma and subsequent inflammation. Reduction of tensile force during the course of cicatrisation and effective regulation of balance between fibroblast proliferation and cellular apoptosis may represent a novel therapeutic target for treating keloids. We reported a case treatment of keloid with Botulinum toxin type A.

Observation: A 25 years old woman, complained keloid on deltoid area since 2 year ago after vaccination. She was treated with over the counter cream for reduced scar but no improvement. Dermatological examination showed keloid on deltoid area, irregular measuring 1.5x0.5x0.2 – 1.5x4x0.4 cm; smooth surface, hard consistency. Patient was informed consent prior treatment of keloid with intralesion BTX-A. Patient received BTX-A 2,5 Unit/cm3 injected into the body of keloid, until slight bleaching was visible, repeated every 4 weeks. Improvement was assessed with decrement of Vancouver Scar Scales (VSS) score before and after treatment.

Key message: Improvements were observed after the 5th session of treatment, VSS decreased and during the treatment no complication was found. Patient is still on follow-up period. Botulinum toxin type A injection is an promising therapeutic agent for keloid.