

**IS THE INSUFFICIENT PATIENT INFORMATION AN OVERLOOKED BARRIER TO  
DISCONTINUING BONT-A THERAPY FOR POST-STROKE SPASTICITY? A  
RETROSPECTIVE COHORT STUDY**

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7 **Abstract**

8 **Purpose:** This study aims to evaluate patient adherence to botulinum toxin (BoNT-A)  
9 treatment and identify the factors contributing to its discontinuation.

10 **Methods:** This retrospective cohort study analyzed the medical records of patients who  
11 received at least one botulinum toxin treatment for post-stroke spasticity (PSS) from 2012 to  
12 2024. Eighty-one enrolled patients responded to structured questions about their reasons for  
13 not consistently continuing BoNT-A treatment.

14 **Results:** The mean age of patients receiving BoNT-A treatment was 53.5 years. Patients  
15 received a total of 154 injections over the 12 years. The mean number of injections was 1.9  
16 (range 1-7), and the mean interval between consecutive injections was 13,3 months. Forty-  
17 seven patients (58.02%) discontinued treatment after only one injection. The leading cause for  
18 treatment discontinuation among all patients was a lack of awareness about the necessity of  
19 continued therapy, as their clinicians failed to inform them (49.4%). Other reasons for  
20 discontinuing treatment included lack of benefits from the injection (33,3%), reduced spasticity  
21 (14,81%), other health issues (9,25%), ongoing treatment elsewhere (12,96%), fear of injections  
22 (5,55%), inability to take time off work (1,85%), and misinformation about coverage for the  
23 BoNT-A injection.

24 **Conclusion:** Most PSS patients received only one BoNT-A injection over 12 years. The  
25 primary reason cited for discontinuing BoNT-A therapy was a lack of awareness about the  
26 necessity of ongoing treatment. The intervals between injections were extended and irregular  
27 for patients who continued therapy. Adequate education from clinicians regarding BoNT-A  
28 treatment can promote patient engagement and improve adherence.

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30 **Key words:** Botulinum toxin, Spasticity, Stroke, Treatment Discontinuation  
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