



# Does botulinum toxin surgery change quality of life in axillary hyperhidrosis? What patients think.

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#### Background

Axillary hyperhidrosis is based on a continuous, symmetric sweating of axillae that often leads to emotional distress and occupational disability. It affects 0.6-1% of the young in western world. When topical treatment doesn't make it, botulinum toxin surgical therapy, which prevents acetylcholine calcium-dependent release on the sympathetic sweat glands terminations, is an attractive alternative to ganglium sympathectomy. During last year, fifteen patients took this treatment in the Thoracic Surgery service of our hospital.

### Objectives

To qualitatively assess botulinum toxin effects by measuring how patients's life quality changes

### Methods & Design

Patient information were collected from our hospital databases. In October 2013, by using a standardized dermatological life-quality questionnaire (DLQI, ©Finlay & Khan), we asked them by phone ten questions that covers six aspects of life (see graph below) before and after surgery. Finally, we performed on SPSS® a Shapiro-Wilks test (normality) and a paired Student's t-test (mean comparing).

#### Results

Data were gathered from ten patients (7 women, average age of 35±6.69). For 6 of them, disease debut happened in childhood; and for the remaining 4 after puberty or in their early twenties. All of them used

aluminum based products, with no results. Using a scale of 30 points (the higher the score, the worse life quality is), the average score decreased in 16±2.82 points (p-value < 0.001) from 19.4 before surgery to 3.4 after). This reduction is marked in all spheres considered except for the social one (positive opinion before and after). All patients but one referred an important decrease of sweating, which now only happens when practicing sports.

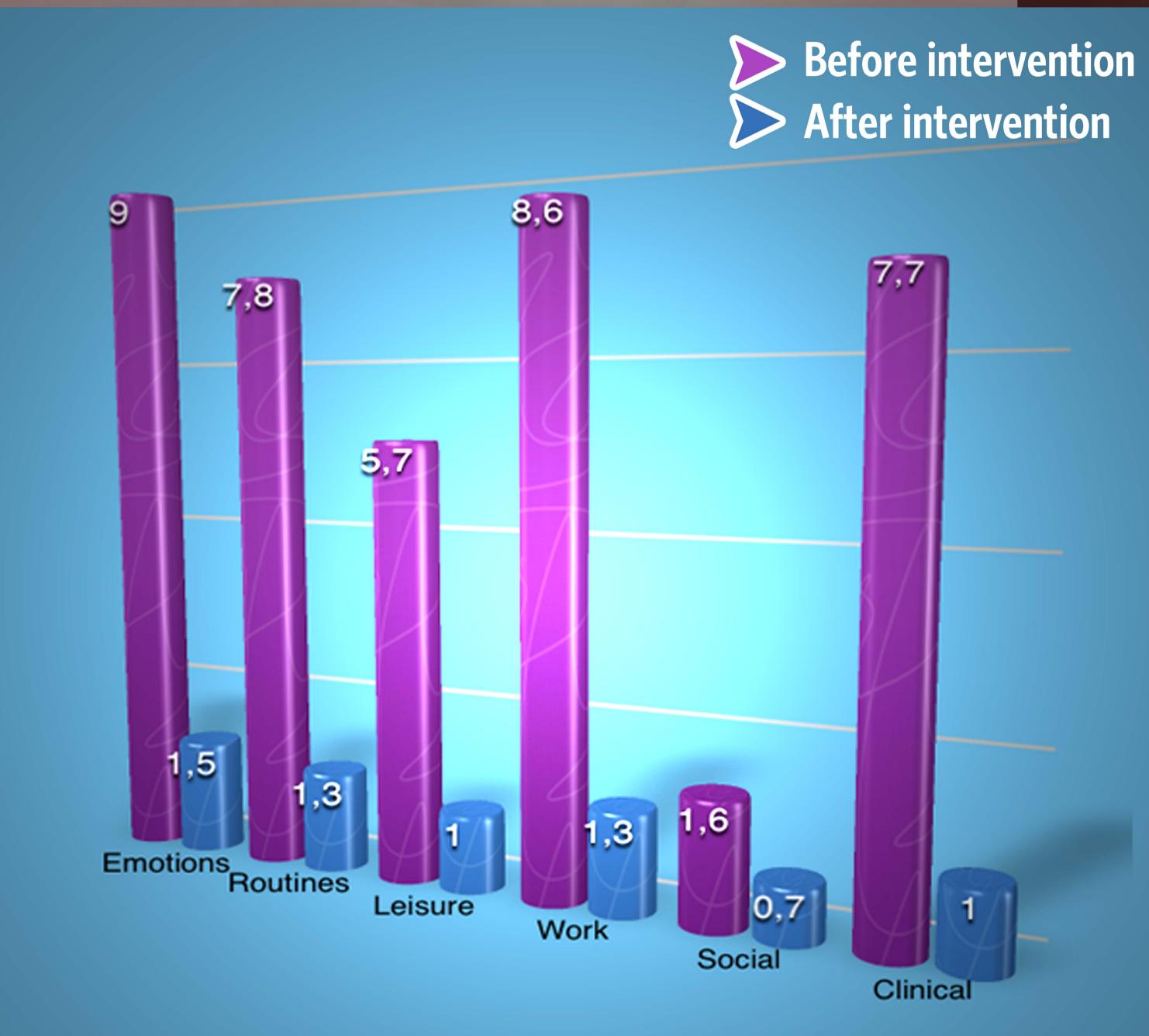


FIGURE 1: Average results for all spheres. Due to the different number of questions covering each one, global scores were adjusted to a scale of 10 to make comparisons easy (the closer to 10, the higher the impact of hyperhidrosis in each aspect).

## Conclusions

Despite the effect only lasts for about six months, botulinum toxin surgery clearly improves life quality in axillary hyperhidrosis patients, who are satisfied with the intervention and are keen to repeat it when the effect dissapears.

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