



*3-Year Clinical Outcomes Comparing
Unilateral and Bilateral Endoscopic
Thoracic Sympathectomy for
Palmar Hyperhidrosis*

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Background

Unilateral endoscopic thoracic sympathectomy (ETS) for the dominant hand of patients with palmar hyperhidrosis (PH) may improve the psychological stress of daily life, such as shaking hands and using a pen, resulting in possibly providing a considerable higher patient satisfaction.

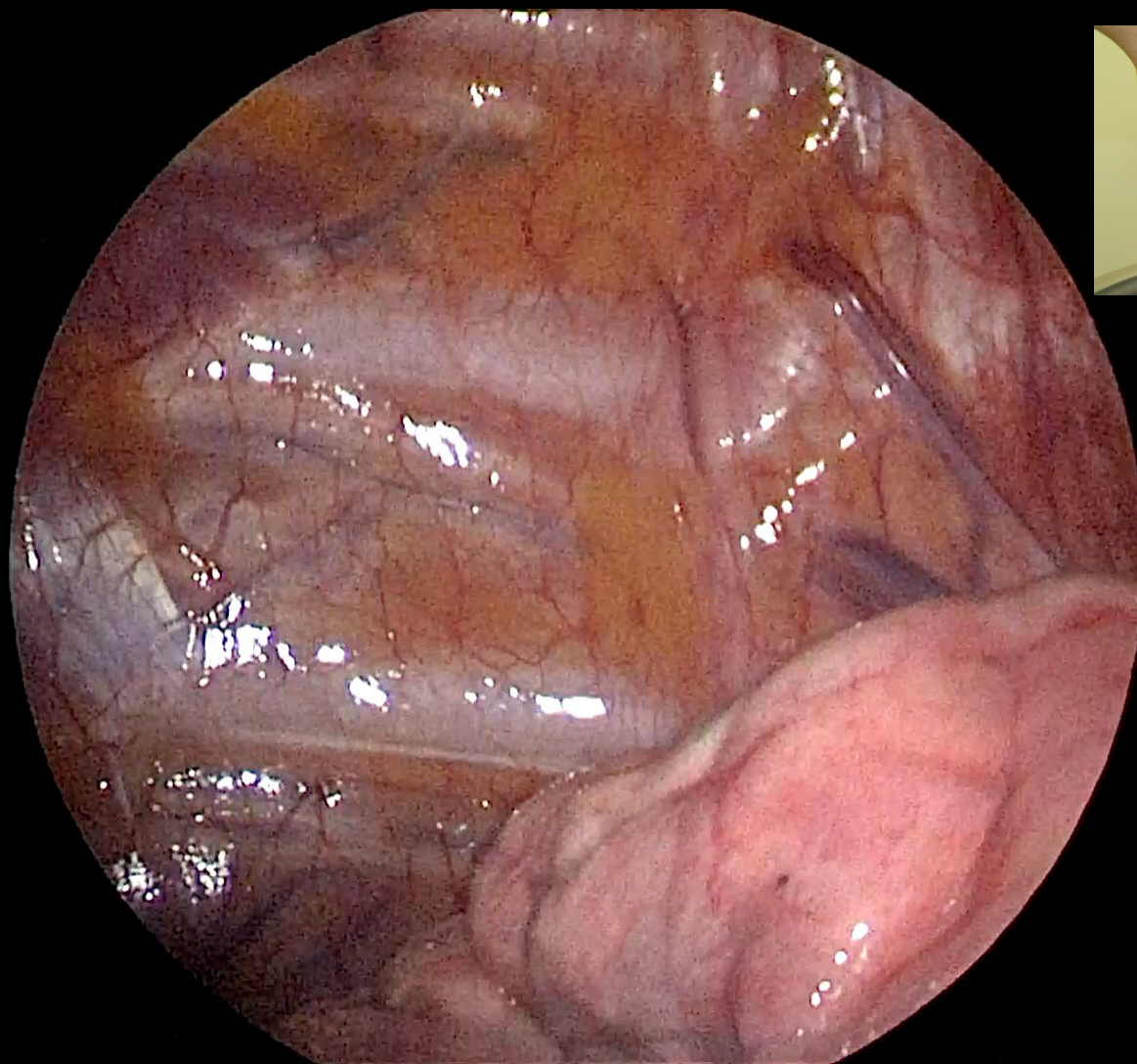
Objectives

The aim of this study is to analyze the resolution of symptoms, recurrence rate, severity of compensatory sweating (CS) and patient satisfaction comparing to unilateral and bilateral ETS for PH.

Materials and Methods

In my clinic, 140 patients with PH underwent unilateral ETS for the dominant hand and 288 patients with PH underwent bilateral ETS in 2016. A 3-year follow-up survey targeted at these patients was performed from late June to early July in this year.

Extended R4 (R4 + G3 partial ablation) ETS



Characteristics of Extended R4 ETS

- Effectiveness of PH : extended R4 > R4
- Severity of CS : extended R4 < R3
- Recurrent cases after extended R4:
 - secondary R3 ETS can be performed easily without adhesion or scar tissues on the 3rd rib.

Recurrence Rates

From October 2007 to December 2018 in my series, 66 patients (1.4%) out of 4,885 cases underwent re-operation R3 ETS due to a complete or partial recurrence.

- In the first period (2007. 10 ~ 2009. 06) :
R4 ETS : recurrence rate 3.8% (24/631)
- In the second period (2009. 07 ~ 2018. 12) :
extended R4 ETS : recurrence rate 1.0% (42/4254)

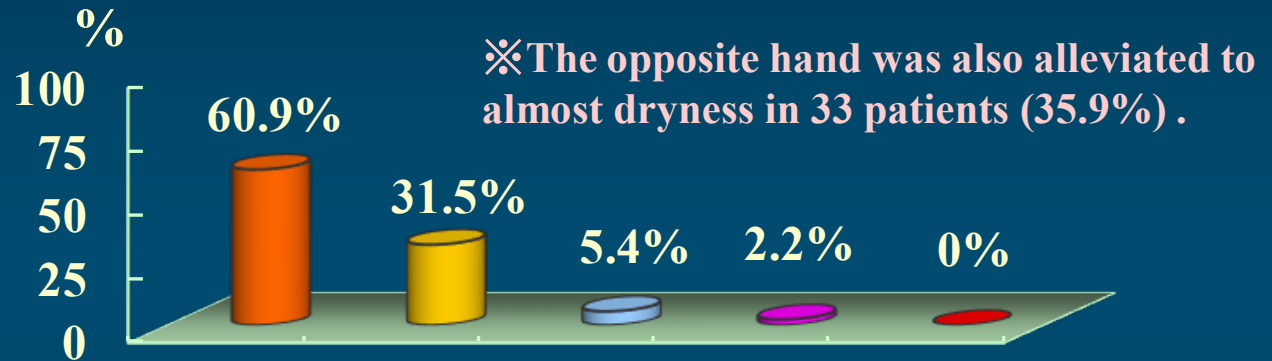
Response Rate of this Survey

- In unilateral ETS group, 92 of 140 patients were available in this survey and the response rate was 65.7%.
- In bilateral ETS group, 110 of 288 patients were available in this survey and the response rate was 38.2%.

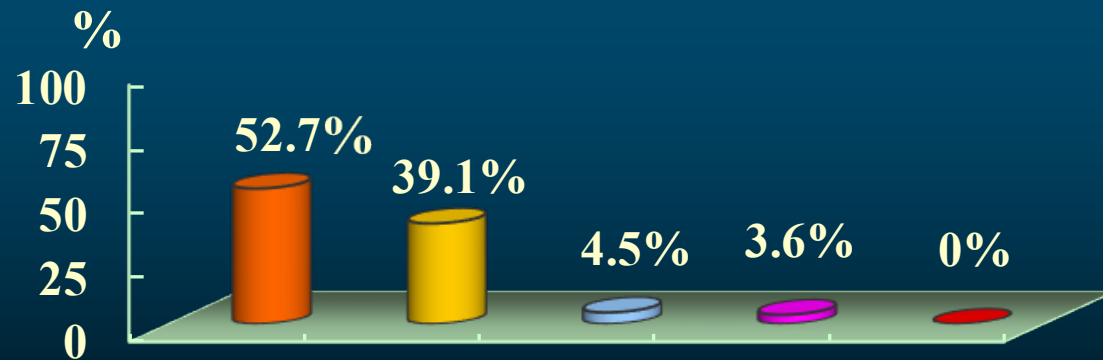
Effectiveness of ETS for PH

■ Dry ■ Almost Dry ■ Slightly Wet ■ Reccurence ■ Worsening

Unilateral ETS
(n = 92)



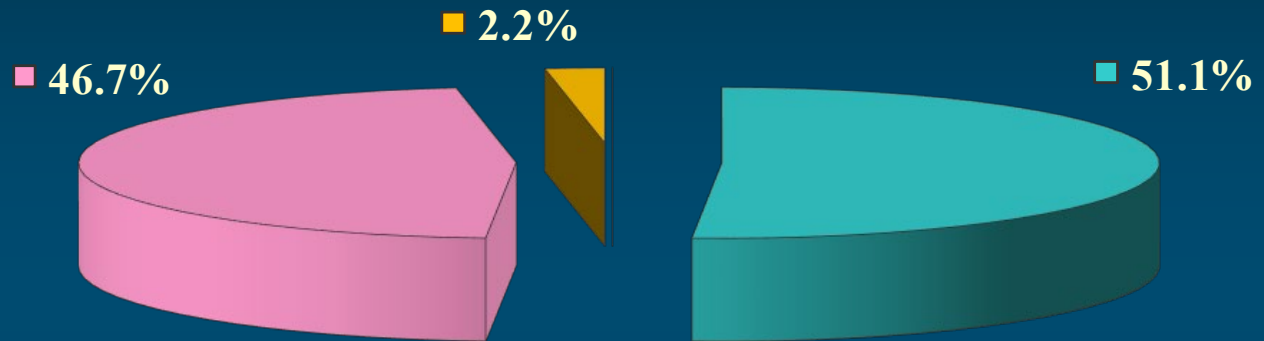
Bilateral ETS
(n = 110)



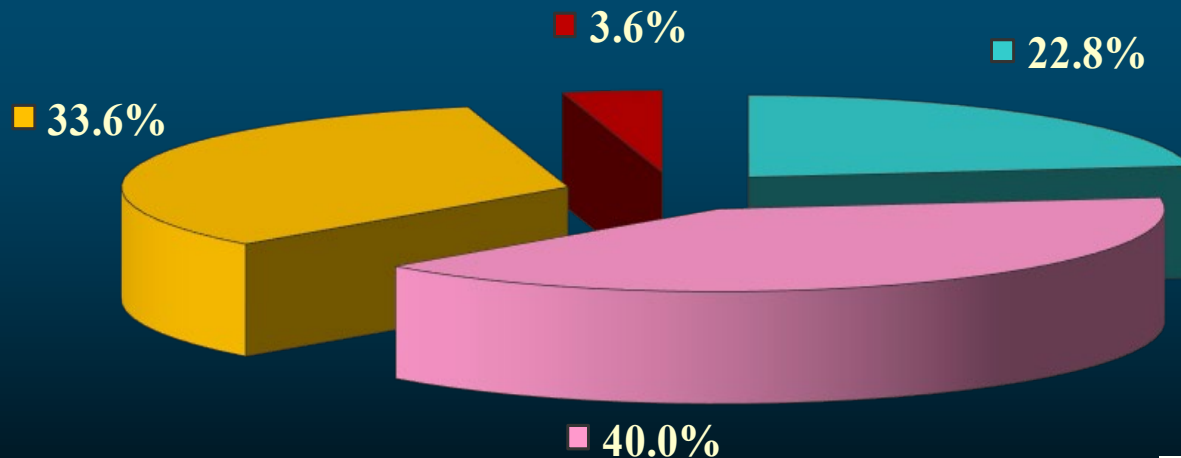
Incidence and Severity of CS

■ Nothing ■ Mild ■ Moderate ■ Severe

Unilateral ETS
(n = 92)

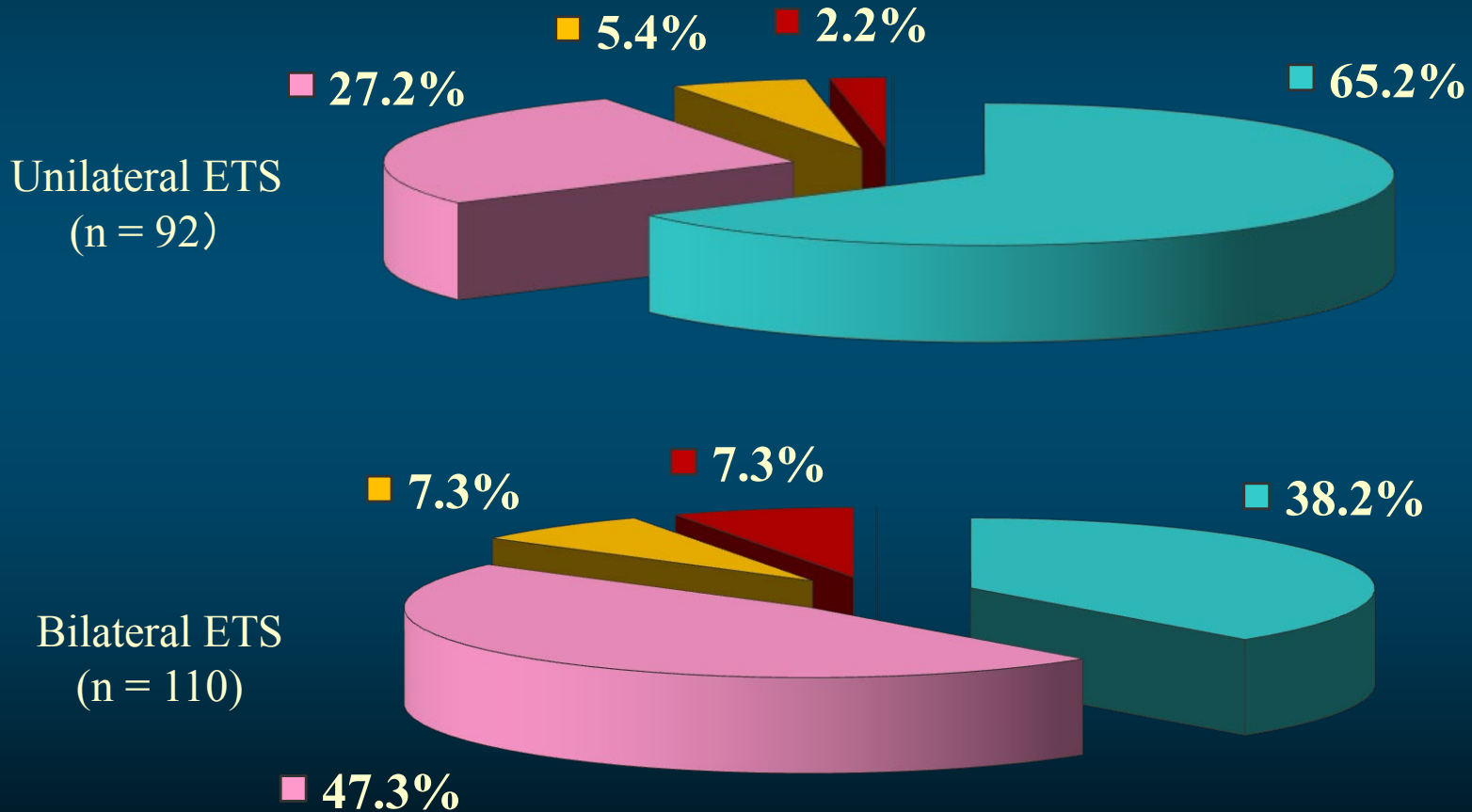


Bilateral ETS
(n = 110)



Patient Satisfaction

■ Excellent ■ Good ■ Fair ■ Discomfort ■ Regret



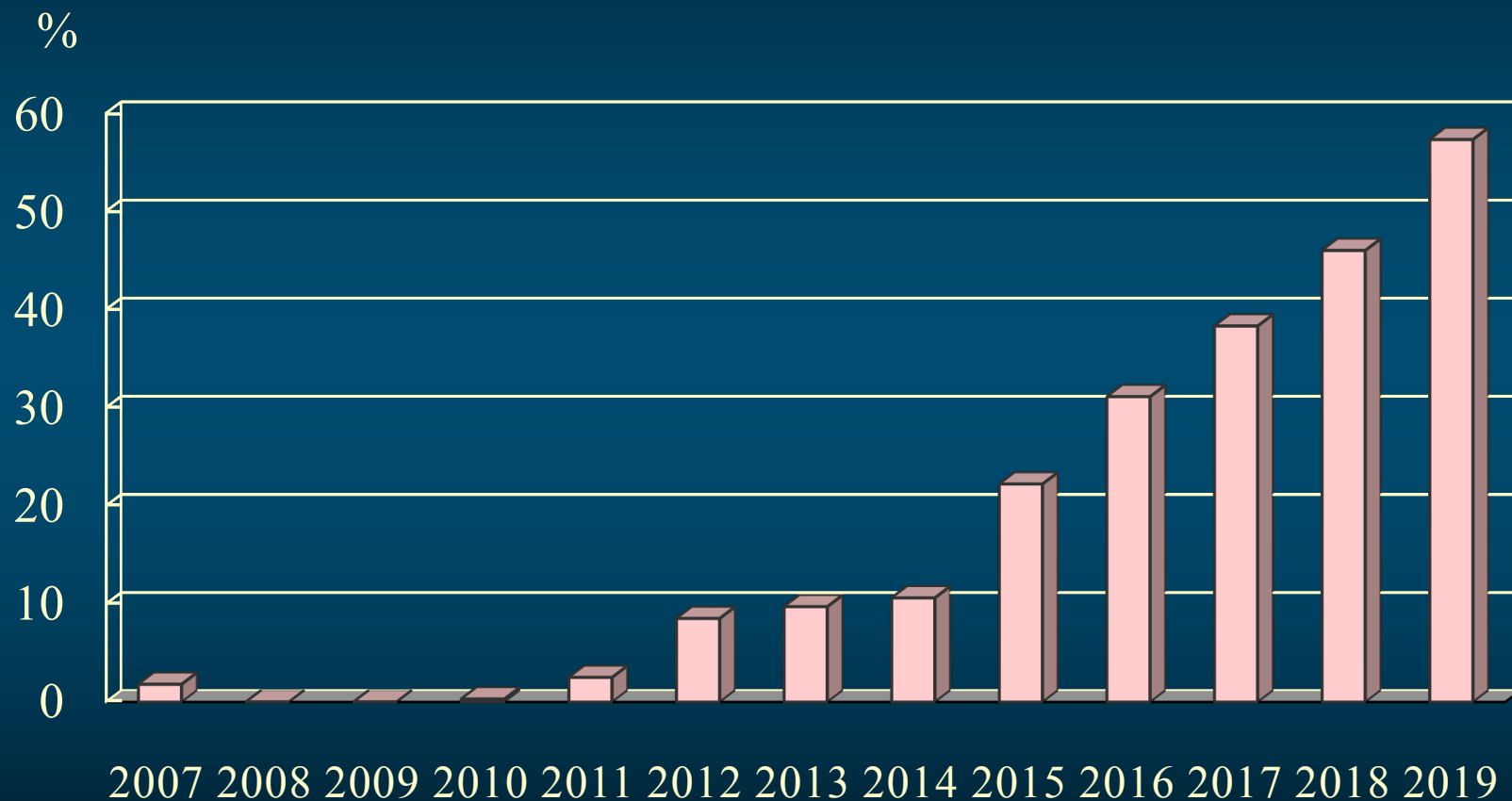
How were the patients after unilateral ETS ?

- After unilateral ETS, 26 patients (28.3%) were performed secondary ETS for the opposite hand, and 15 patients (16.3%) hoped the opposite hand operation in a 3-year follow-up survey.
- The opposite hand was also alleviated to almost dryness in 33 patients (35.9%) only by unilateral ETS.
- After all, 51 patients (55.4%) did not necessitate further surgery after unilateral ETS.

CS after Secondary ETS for the Opposite Hand

CS after unilateral ETS			CS after secondary ETS	
nothing	14/47	→	nothing	9 (64.3%)
		↘	mild	4 (28.6%)
		↘	moderate	1 (7.1%)
mild	12/43	→	mild	8 (66.7%)
		↘	moderate	4 (33.3%)
moderate	0/2	→ X		0
total	26/92 (28.3%)			

% of Unilateral ETS in my Clinic



Conclusion

In a 3-year follow-up survey, unilateral ETS had less incidence of severe CS and provided a considerable higher level of patient satisfaction comparing to bilateral ETS. The patients who underwent unilateral ETS consider the options as to the treatments for the opposite hand eventually after having experienced CS.