

NACT NORDIC ASSOCIATION FOR CONVULSIVE THERAPY

# ECT in OCD

*still obsolete?*



pascal sienaert  
upc ku leuven  
[pascal.sienaert@upckuleuven.be](mailto:pascal.sienaert@upckuleuven.be)

UPC  
Z.ORG KU LEUVEN

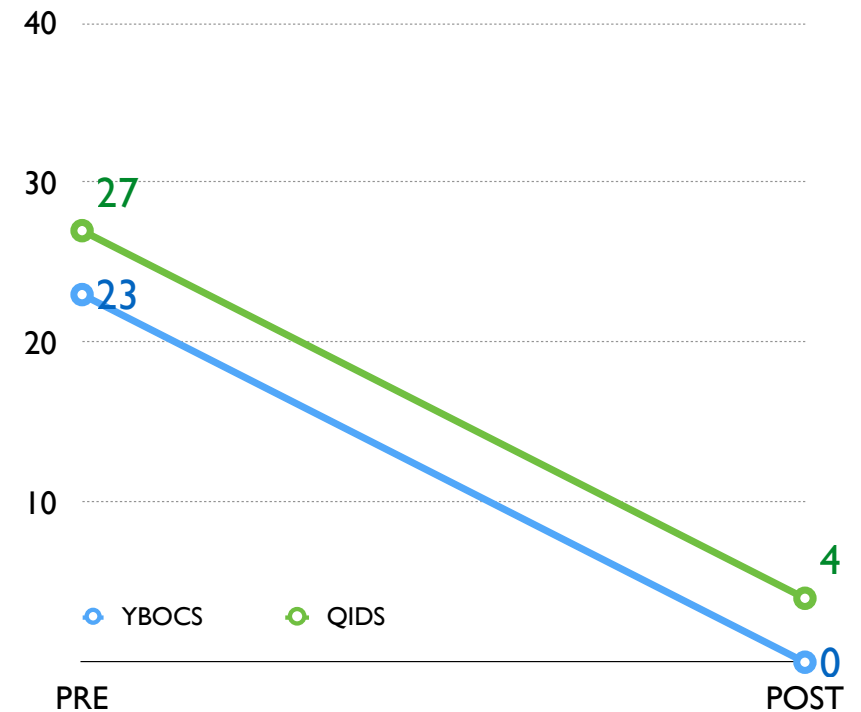
# Case Catherine

- 18 - onset obsessions
  - selfie on FB 'with *my* girlfriend'
    - 'I'm lesbian, therefore I have to kill myself'
    - triggered by 'romantic/sexual' content
- 25 - several admissions - TS + TS on ward '*to stop unbearable thoughts*' - SCIDII No PD - OCD
  - escitalopram - CBT
  - flupenthixol



# Case Catherine

- BF ECT 0.5/20/4.2/75 - 2/W
  - ECT 1-5 - QIDS 4 - YBOCS 0
- start M-ECT 20 ECT in 54 wk
  - 1/W N=4 - 1/2W N=4 - 1/3W N=4 - 1/4W N=8
- 1 year FU - escitalopram
  - symptom free
  - back to work - getting married



# Treatment

*ocd*

- SRI, maximum tolerated doses, 12 weeks
- CBT - exposure / response prevention
- 40% - 60% show '*favorable response*'
  - YBOCS  $\downarrow \geq 25\%$
  - CGI-I 1 or 2 (*very*) *much improved*



Fontenelle et al. 2015



# 1943

Moriarty & Weil.  
Combined convulsive  
therapy and  
psychotherapy in the  
neuroses.  
*Arch Neurol & Psychiat*  
1943, 50, 685

## Breaking the vicious circle of compulsions...

Moriarty, John D., and Weil, Andre A. COMBINED CONVULSIVE THERAPY AND PSYCHOTHERAPY IN THE NEUROSES. [*Arch. Neurol. & Psychiat.*, 50: 685, 1943.]

A new method of treatment of the neuroses was proposed by the authors before the 99th Annual Meeting of the American Psychiatric Association. It consists of a brief series of convulsive treatments along with psychotherapy of various types. The procedure of choice usually is first analytic psychotherapy, followed by four to six electric shock treatments and, finally, by efforts at re-education. This form of therapy seems definitely to shorten the course of the disease, as could be seen by comparison with two large control groups. None of the group treated in the aforementioned way had to stay in the hospital more than eight weeks after shock therapy was initiated. The results in 20 neurotic patients, who received this form of treatment, could be tabulated as follows: 50% remissions, 45% improved or much improved, only 5% unimproved. Follow-up studies show not only maintained improvement, but also gain in inner resources. Some conceptions of the healing mechanisms are briefly discussed, including the improvement of affective tone, the fostering of active co-operation with the therapist and the breaking of the vicious circle of the "repetition compulsion." (Authors' abstract.)

2005

**NICE** National Institute for  
Health and Care Excellence



# Obsessive-compulsive disorder and body dysmorphic disorder: treatment

Clinical guideline

29 November 2005

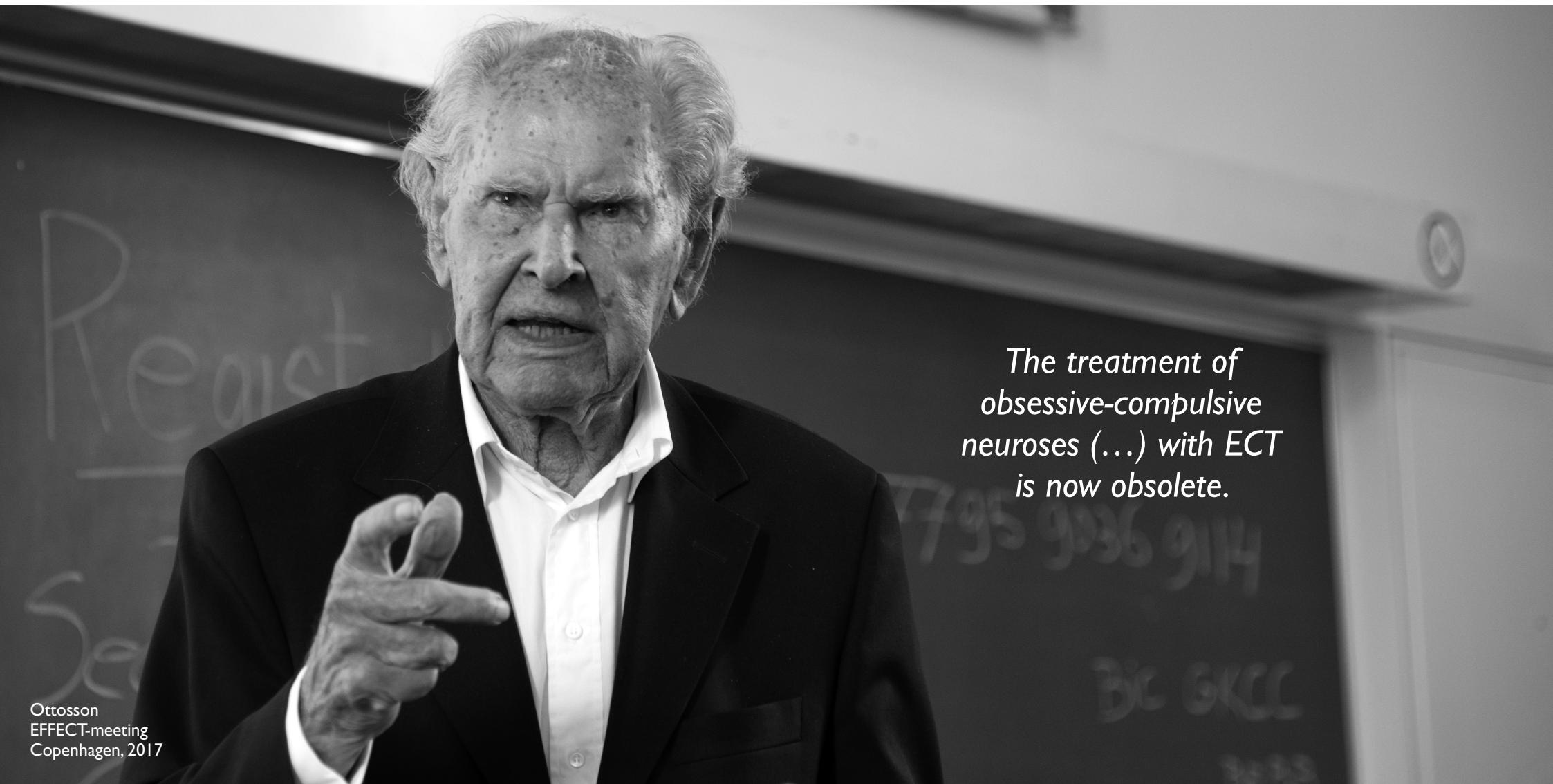
*ECT not mentioned*

# ECT in OCD

## *practice guidelines*

NICE	APA	WFSBP	NVVP	CANADA	INDIA
2005	2007	2012	2013	2014	2017
not mentioned	not recommended	not mentioned	positive effect has not been sufficiently demonstrated.	not mentioned	not recommended





*The treatment of  
obsessive-compulsive  
neuroses (...) with ECT  
is now obsolete.*

Ottosson  
EFFECT-meeting  
Copenhagen, 2017

Jan-Otto Ottosson (1985). Use and misuse of electroconvulsive treatment. *Biol Psychiatry* 20, 933

*When it is occasionally  
found to be effective,  
the mechanism of action  
is probably **suggestion**.*

Jan-Otto Ottosson (1985).  
Use and misuse of  
electroconvulsive treatment.  
*Biol Psychiatry* 20, 933

# Independent anti-obsessional effect?

## *isolated case reports*

- often comorbid *depression* Dieuzeide 73; Dubois 84; Gruber 71; Rosenberg 68; Husain et al 93; Swartz & Chen 99; Rudorfer 00; Casey & Davis 94; Thomas & Kellner 03; Mishra et al 07; Dell'Osso et al 07; Chiu et al 2020
- 'pure' OCD Mellman & Gorman 84; Loi & Bonwick 10; Raveendranathan et al 12
- comorbid *body dysmorphic disorder* Ma & Li 2021
- improvement of OCD after *epileptic* seizure Basu et al 05
- *M*-ECT Husain et al 93; Raveendranathan et al 12

# ECT in OCD

*Studies, N ≥ 10*

Author (yr)	N	Design	Improved %
Milligan (46)	11	Case series	100
Grimshaw (65)	32	Case series	52
Walter (72)	80	Case series	40
Dubois (84)	19	Cohort study	68
Maletzky (94)	32	Case-series	<i>no info on 14/32</i>
Garrido (98)	17	Prospective, non-randomised	60
	191		



1946

Milligan WL

Psychoneuroses  
treated with  
electrical  
convulsions - the  
intensive method.

Lancet  
1946, 2:516-520

**PSYCHONEUROSES**  
**TREATED WITH ELECTRICAL CONVULSIONS**  
THE INTENSIVE METHOD  
W. LIDDELL MILLIGAN

- OCD, N=11
- BT, 180 v,olt 0,4 sec
- 4 ECT/d, various number of days
- *'it is possible to treat 20 patients in 8 minutes'*
- *'In some cases it is necessary to reduce the patient to the infantile level, in which he is completely helpless and doubly incontinent'*

	MALE			FEMALE		
	Re-covered	Re-lieved	Not im-proved	Re-covered	Re-lieved	Not im-proved
Anxiety states ..	10	10	1	8	8	1
Hysteria .. ...	9	4	..	14	13	1
Obsessional states	4	..	..	5	2	..
Mixed states ..	2	5	..	..	3	..



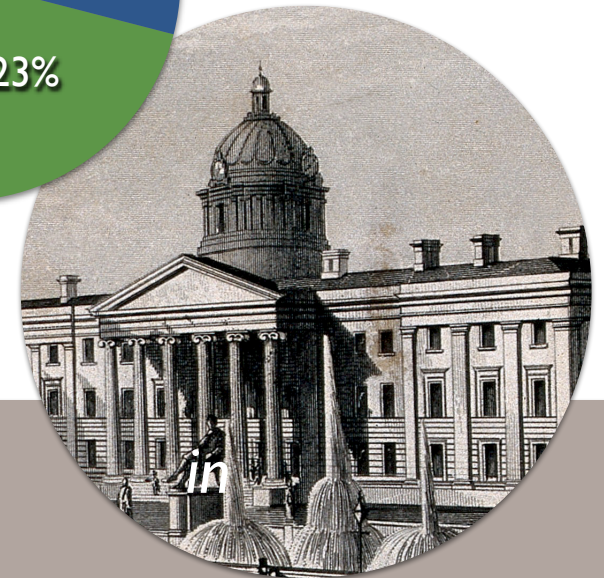
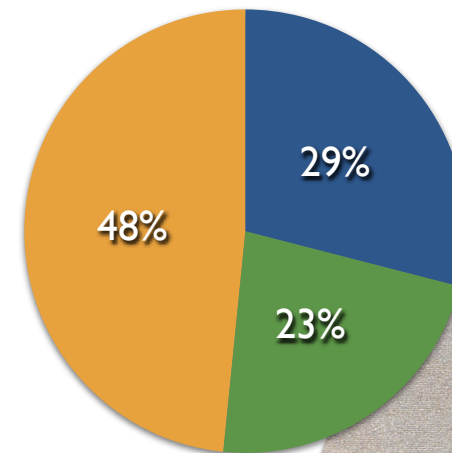
# The Outcome of Obsessional Disorder A Follow-up Study of 100 Cases

By LINTON GRIMSHAW

- ECT, N=31
- at follow-up

- Much Improved / Recovered
- Improved
- Unchanged / Worse

- 10/16 who appeared to benefit stated they thought ECT was not responsible for their improvement.



*It would appear that ECT has little place  
in the treatment of obsessional disorder*

# Refractory Obsessive Compulsive Disorder and ECT

1994

Barry Maletzky, M.D., Bentson McFarland, M.D., Ph.D., and  
Alex Burt, M.D.

- N=32, resistant to CBT - meds - *N=19 - No comorbid depression*
- BT, 'en bloc', 3-5 seizures / session
- '*most subjects (no info on 14/32) showed considerable improvement in OCD symptoms and remained improved up to 1 year after therapy*'
- '*independent of improvement in depression scores*'

1988

*Convulsive Therapy*  
4(4):314-320 © 1988 Raven Press, Ltd., New York

## Electroconvulsive Therapy in Obsessive-Compulsive Disorder

Sumant Khanna, B. N. Gangadhar, Vinod Sinha, P. N. Rajendra, and  
S. M. Channabasavanna



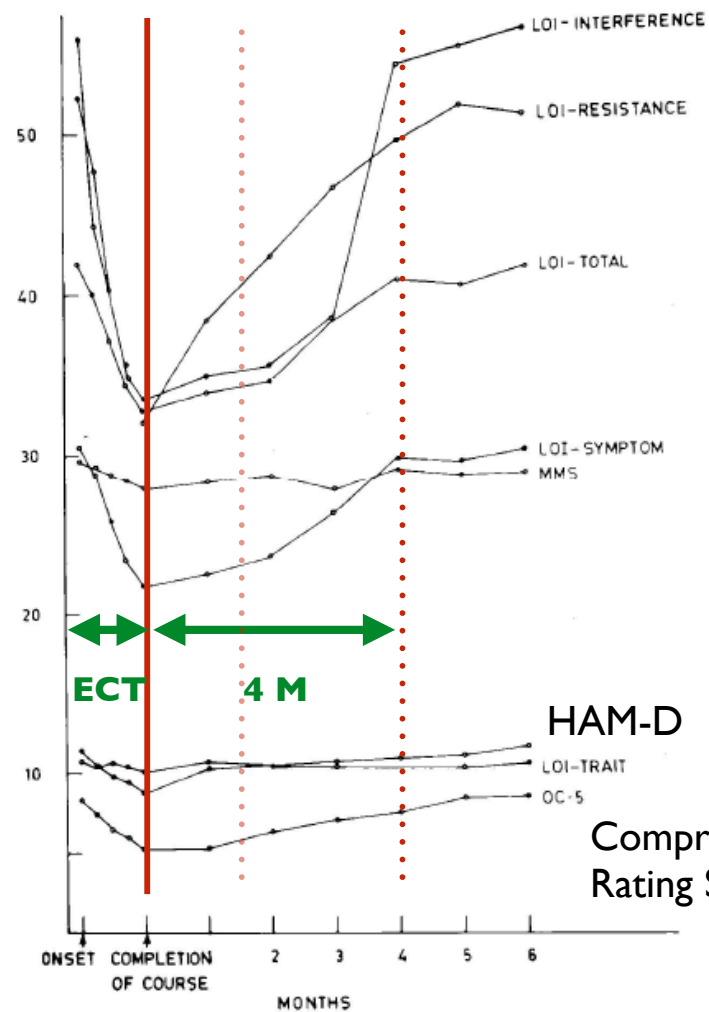
- N=9, Non-response *<30% improvement with TCA + CBT*
- RUL / BT ECT
- *Subjects with depression were included provided the depression started  $\geq 2$  months after onset of OCD symptoms*

>20% ↓  
global OCD ratings

initial *improvement*

*maintained* short-term  
1-4 months

Khanna et al (1988). ECT in  
Obsessive-Compulsive Disorder  
*Convuls Ther* 4(4), 314-20



Leyton's  
Obsessional  
Inventory

HAM-D

Comprehensive Psychopathological  
Rating Scale-Obsessive Compulsive

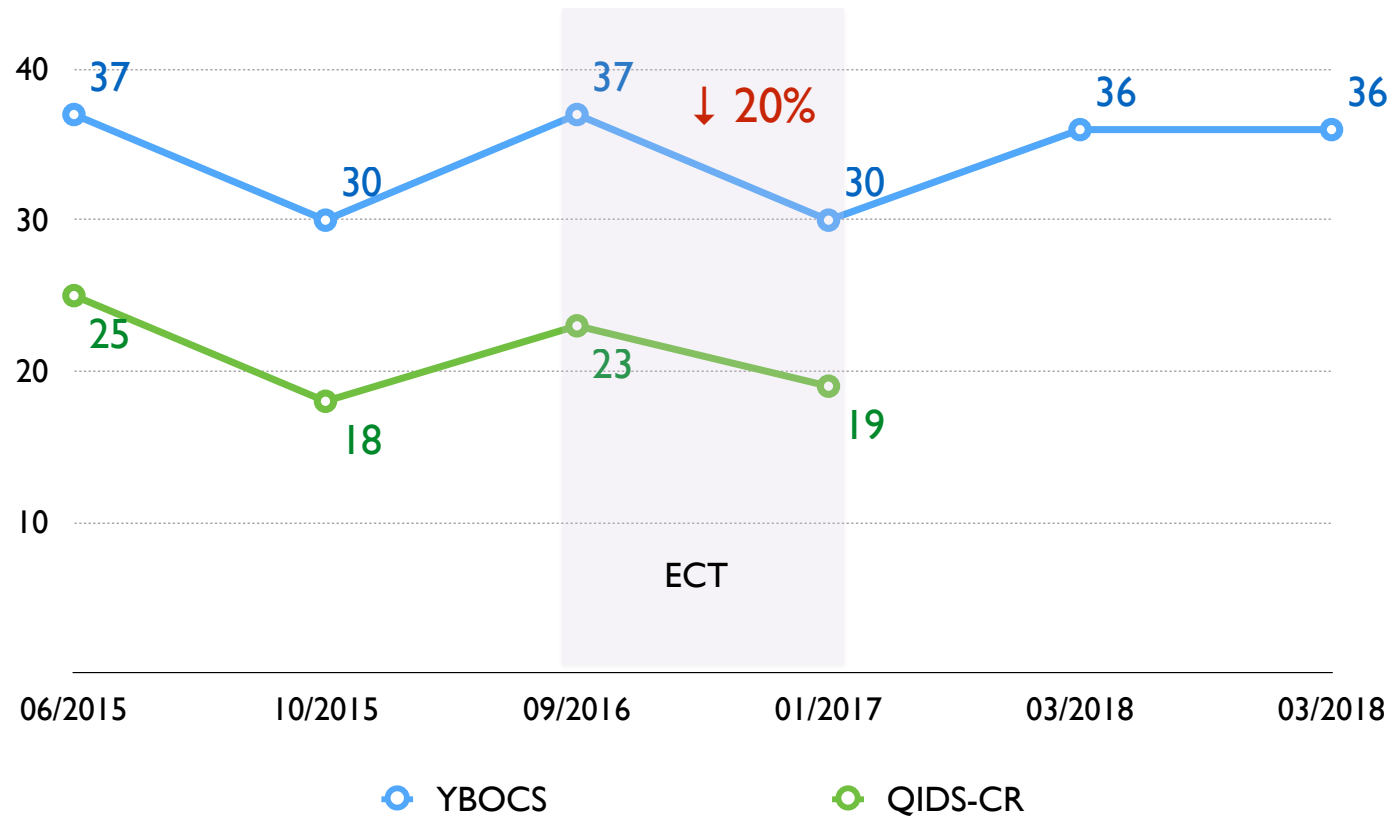
# Case Marianne

- 46
- ICU-nurse >1992
- <40 - obsessions, magical thinking, fear of contamination
- >40 - OCD - unable to work
- CBT, multiple meds - 'no effect'
- fluctuating unremitting course
- own disease theory - childhood adversities





# Case Marianne



# Case Marianne

- 12 BT ECT, 2x/w - nortriptyline, lithium
- during/post ECT-course
  - YBOCS 30/40 - QIDS-C 19
  - *cuddle fellow-patient*
  - *can touch bed-end with feet*
  - *dog can lick face*
  - *shoes don't have to point to the left*



# ECT in OCD

*systematic review - case reports/series*

- 50 papers
- positive response in 60.4%
- ECT responders
  - more severe OCD
  - later onset of OCD
  - more frequently non-depressed
  - received a fewer number of ECT sessions
  - less frequently previously treated with adequate trials of SSRI/CBT

265  
cases!



# ECT in OCD

*systematic review*

- *more benign, non-resistant cases?*
  - 53% previously treated with SRI
  - ‘older’ publications - *inclusion of non-resistant cases in the pre-SRI-era?*
    - after 1990 - 66% response

# Neurostimulation in OCD

## *systematic review - ECT-studies*

- 1 retrospective chart review *Maletzky et al 94*

mean S/ improvement 48%  
at treatment-end,  
35% after 1yr

- 4 case-series *Tomruk et al 10; Liu et al 14; Manhas et al 16; Aggarwal et al 19*
- 1 case-report *Agrawal et al, 18*

response rate 79%

S/ improvement 43-95%



# Neurostimulation in OCD

## *systematic review - ECT-studies*

- lack of studies
- variable response rates
  - greater *response rate (79%)* than previous reviews
  - considering the patients' level of severity and treatment resistance, the magnitude of *effect is large*

*it cannot be stated that this provides evidence that  
ECT is indeed effective for OCD.*

Fontenelle et al. ECT for OCD: a systematic review.  
*J Clin Psychiatry* 2015;76(7):949-57.

*ECT may not be  
as useless in OCD  
as many have  
contended.*

*Harold A. Sackeim  
personal communication*



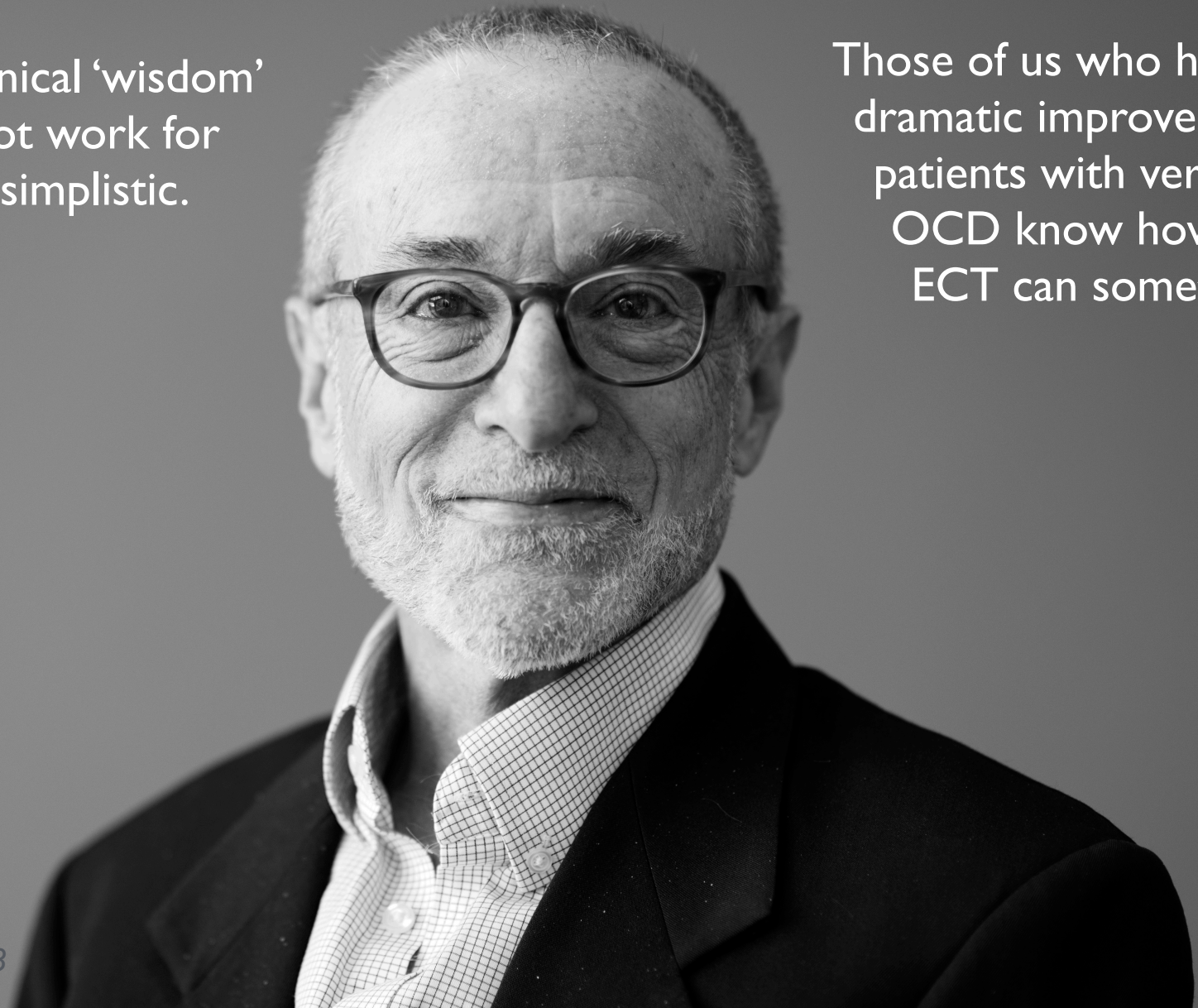


The oft-heard clinical 'wisdom' that ECT does not work for OCD is just too simplistic.

Those of us who have seen dramatic improvements in patients with very severe OCD know how helpful ECT can sometimes be

Charles Kellner  
ectpsych.blogspot.com  
aug 27, 2021

© PS - NACT Tallinn, May 2018





*need to re-evaluate the role of  
ECT in the treatment of OCD*



*substantial acute effect,  
but high relapse potential*



*option in severe refractory cases  
(before DBS)*



*M-ECT should be considered*