



CAPD and Dyslexia

Jack Katz
Auditory Processing Service
&
KU Medical Center

April 29, 2016



Confession

- I am not an expert in Dyslexia
- Much of my information is from years ago when...
 - Based on the Webgroup quite a few of you are heavily involved w/ Dyslexia, so you can bring us up-to-date
- But what I would like to share makes so much sense that I think it will be informative and useful



Dyslexia / Buffalo Model+SSW



11:35 – 3:14

First Time I Heard of “Dyslexia”

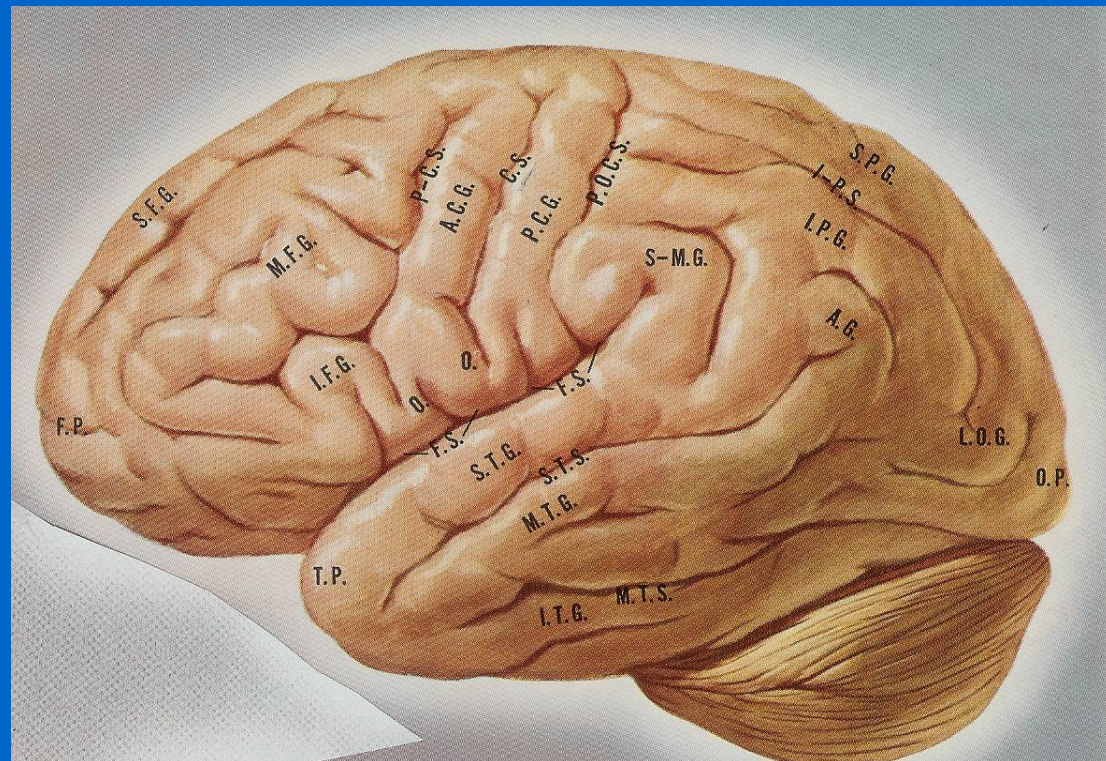
- Dr. Robert West (1954) told us,
“Never use the term, ‘Dyslexia!’”
- He said back then,
“It means something different to everyone”
- I’m sorry to say that it still does
- ***“I tried my best, Dr. West, but it wasn’t good enough”***
- Because everyone else is using it and
- And I know of no agreed upon term to replace it.

Dyslexia - My Personal Definition

- A severe reading and/or spelling problem (Thanks Jay)
- It can be auditory, visual or both
- BTW: Even if associated with other issues does not mean that there are not CAPD factors as well
- Just like other brain issues there may be additional auditory problems
- Some schools consider Dyslexia ≥ 2 yrs behind reading
- Some parents consider 'bd' reversals Dyslexia

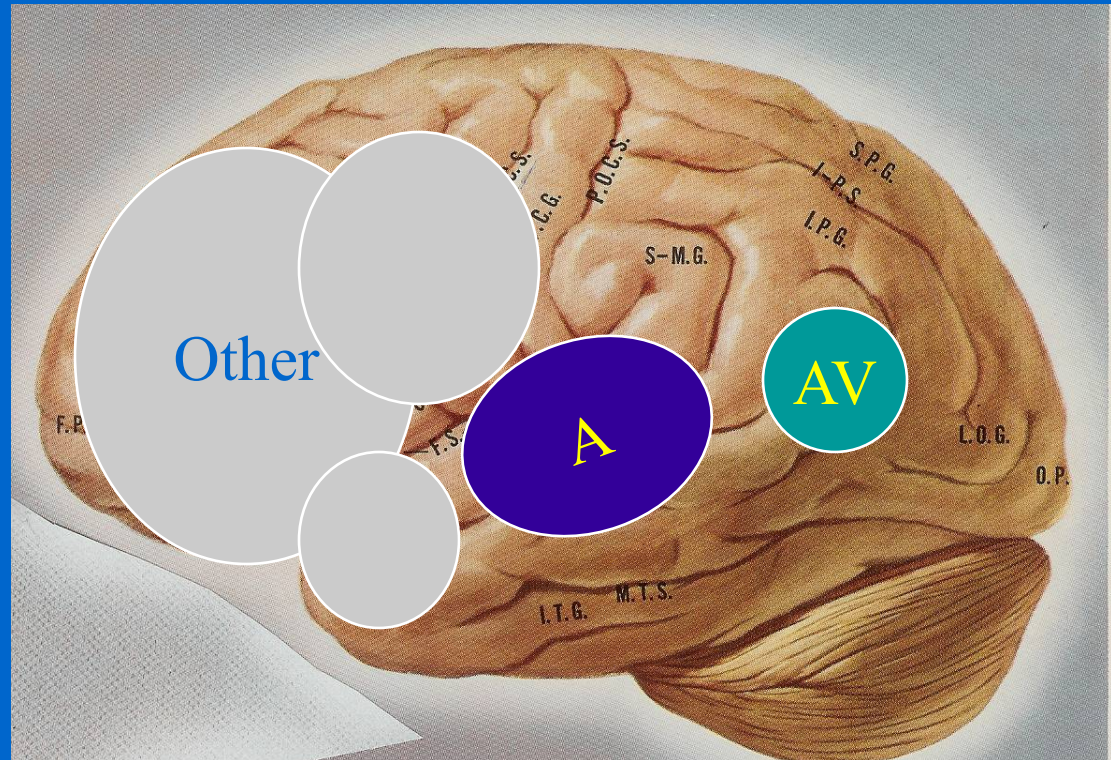
Origin of Dyslexia

- 'Dyslexia' started as a neurological diagnosis
- A severe reading disorder that is associated with impairment of the angular gyrus (AG)
- AG is the auditory-visual integration center
- Connects visual-spatial & auditory-language centers...



Models of Dyslexia

- When I studied Dyslexia – Behavioral 4 Categories
- Boder '73: **Auditory** (*think DEC*); Visual (not auditory) & **Auditory-Visual** (*think INT*)
- Aylward '83: **Other** (*think TFM & ORG*)
- So models of Dyslexia & B-M are consistent



Common Findings with Dyslexia/severe RdSp

Extreme Examples: Integration Patterns on SSW 8CN

A	B	C	D		E	F	G	H		
0	0	0	0		0	14	0	0		Type-A LC
↑R, ↓L Handers & ↑Ambidextrous										
0	7	0	0		0	0	0	0		Type-A RC
Some with similar academic issues (likely INT)										
1	3	10	4		2	11	5	0		SIR

Supportive for INT: Extreme/Integration Delays (XX/IX) &
 2-By-3: 2/9 measures ≥ 3 SDs poorer than the mean₈

Testing Before & After Therapy

- Sometimes lots of SSW errors but no Type-A (SIR?)
- But after therapy (DEC & TFM) we get a Type-A that was hiding under the DEC & TFM errors.
- I currently use Dichotic Offset Training to address dichotic auditory symptoms.
- Benefits seen on SSW retest, but especially on DOM

SSW Pretest & Basic Therapy Retest

All 5 had Type-A

Mdn 11 yrs

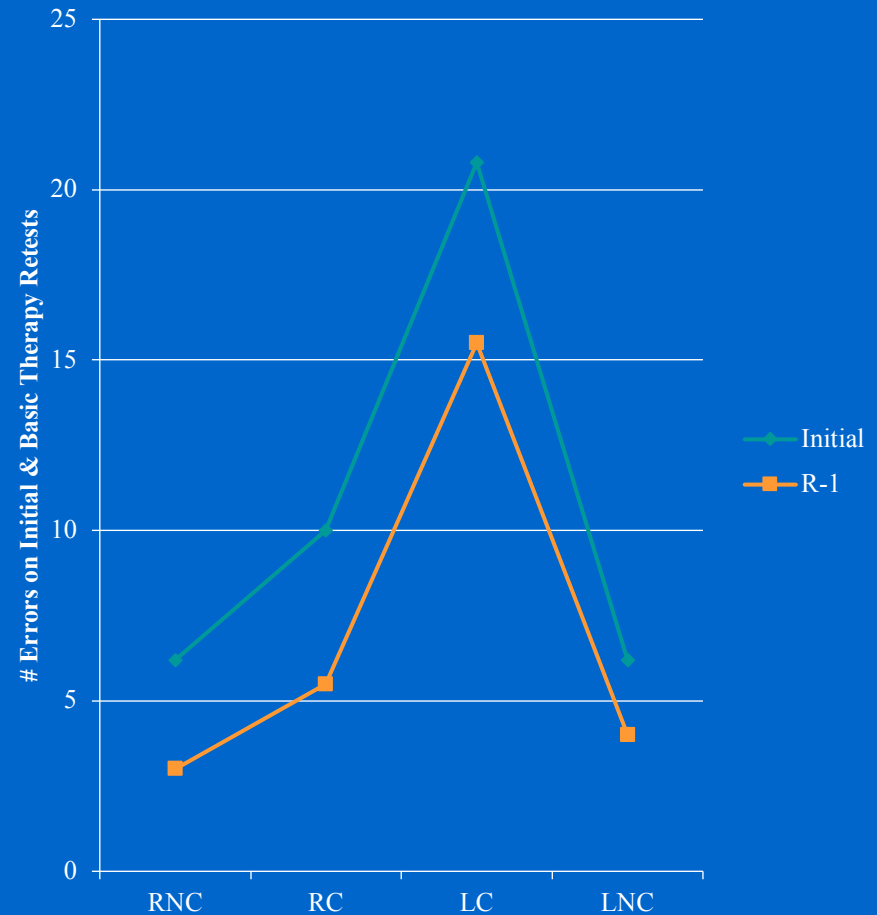
R-1: M= 13 sessions

Had DEC & TFM

No DOT

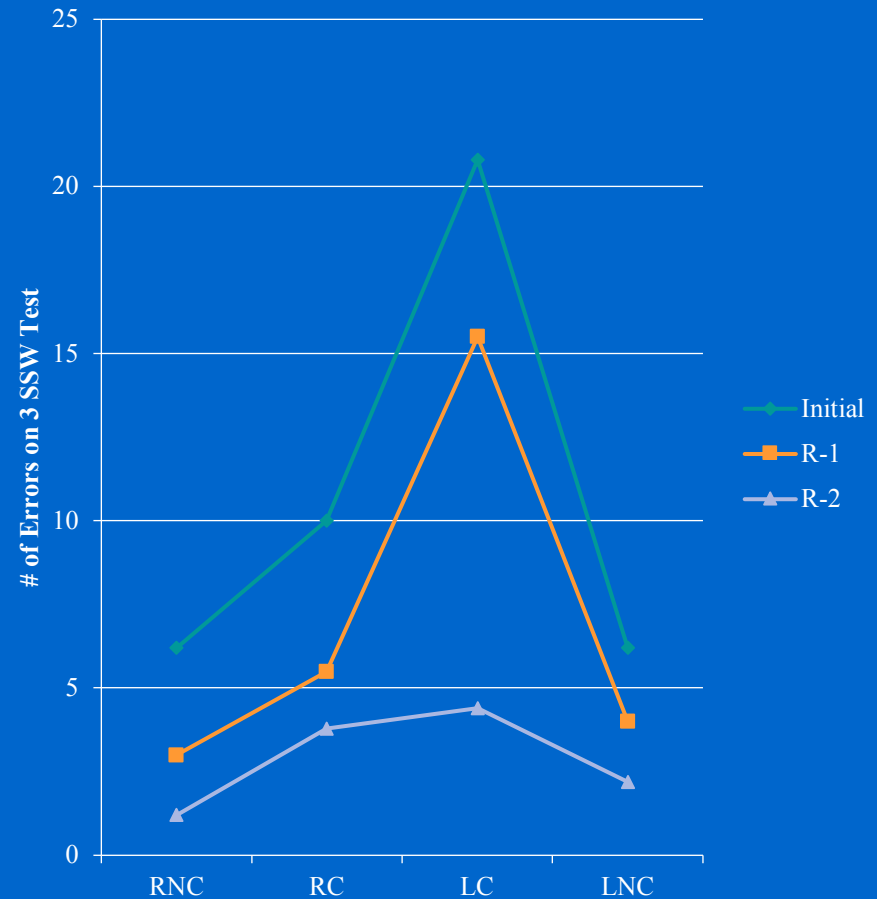
Retest still shows LC
challenge

Then they had DOT ↓



SSW Pretest, Retest & Post DOT Retest

- R-2 DEC & TFM &
- Dichotic Offset Trng:
- Mdn # Sessions = 10
- Total Time 2 hours



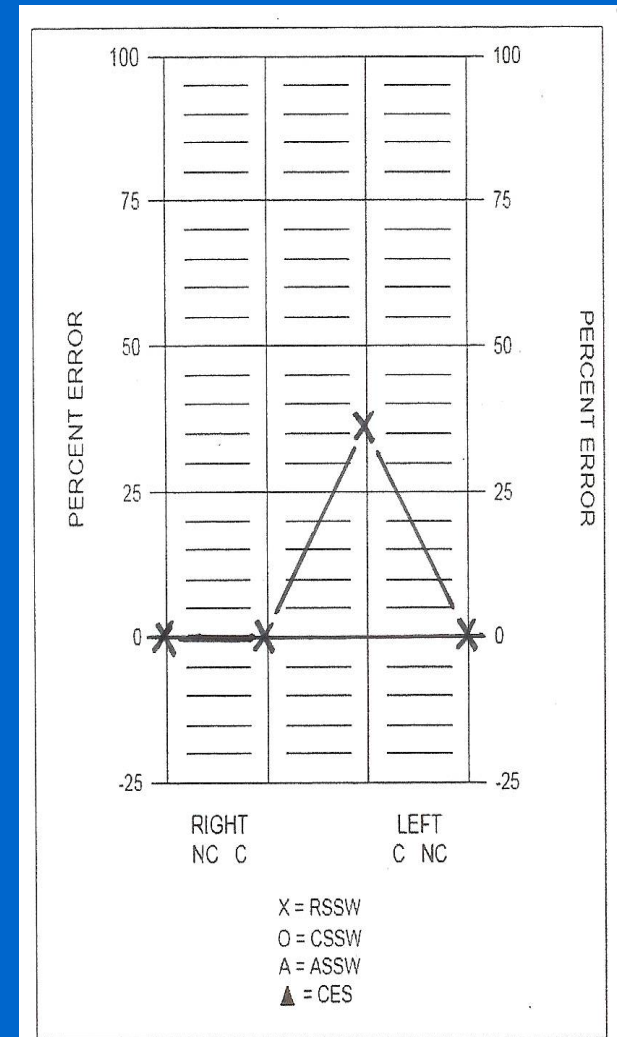
Explanation of Type-A INT Pattern

- Read article Peters (1965) counting clicks each ear...
- Normal listeners

* * * * *

SSW Type-A cases

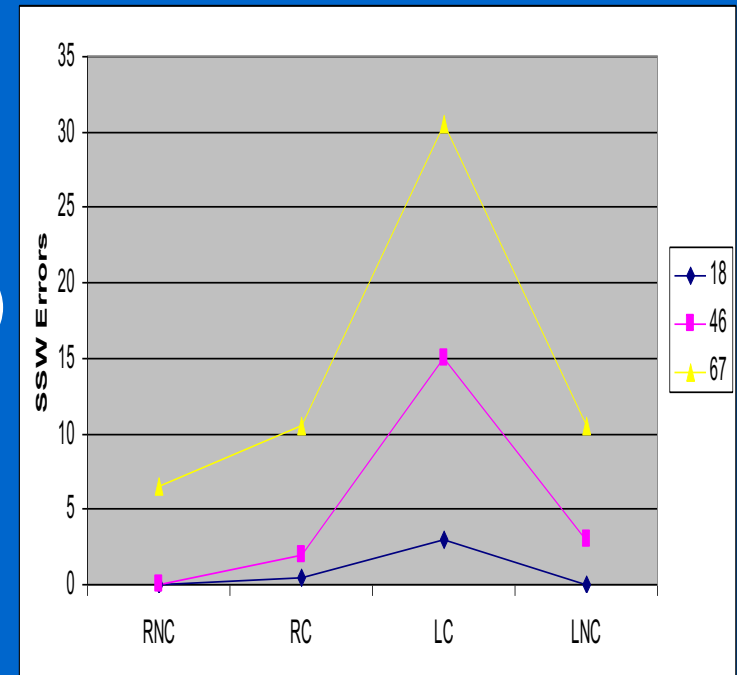
- Slow LE pathway?
- Can miss LC when LEF.
- INT most severe cat. often w/ Dyslexia



SSW: Corpus Callosum Cases by Age

Does the CC seem to age quickly?

- SSW NOE in 14 cases 16-71 yrs (11 tumors, 3 agenesis)
 - Youngest –may be biased (3/4 agenesis of cc), but looks *reasonable*)
 - SSW all normal Tot (1/4 TypA, 2/4 SIR+)
 - Middle group –clear LC peak
 - LC 12 SDs > mean (3/6 TypA, 5/6 SIR+)
 - Oldest –ageing + lesion (60-69 yr norm)
 - LC 10 SDs, RC 5SDs > mean, all abnorm
 - (0/4 TypA, 3/4 SIR+)



Summary: CAPD and Dyslexia

- Dyslexia refers to severe reading-spelling disorder
- In the Buffalo Model it is linked to INT category in most cases (before/after therapy)
- The TypeA pattern, Standard Integration Ratio (SIR) & IX/XX and 2B3 are the 4 signs of INT we look for
- Dichotic Offset Training is a procedure that can help to correct the auditory aspect of Dyslexia.
-

Thank You!

