

# Is it possible to integrate retrogenetic and severity concepts into dementia care?

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Selección y actualización de diapositivas para las  
clases impartidas en el curso

NEUROBIOLOGIA DE LA CONDUCTA,  
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# Retrogenesis.

Barry Reisberg · Emile H. Franssen  
Syed Mahmood Hasan · Isabel Monteiro  
Istvan Boksay · Liduin E. M. Souren  
Sunnie Kenowsky · Stefanie R. Auer · Shahid Elahi  
Alan Kluger

**Retrogenesis: clinical, physiologic, and pathologic mechanisms**

**Reisberg et al:**

**.../... A knowledge of retrogenesis and the developmental age of the AD patient, could serve as a “nidus for the development of the nascent science of disease management” (1999, p. 7)**

Towards a Science of  
**Alzheimer's Disease Management:  
A Model Based Upon  
Current Knowledge of Retrogenesis**

**BARRY REISBERG, SUNNIE KENOWSKY, EMILE H. FRANSSSEN,  
STEFANIE R. AUER, AND LIDUÏN E. M. SOUREN**

**Approach to  
the Treatment of Behavioral  
Disturbances and Symptomatology in  
Alzheimer's Disease Based upon  
Recognition of the Developmental Age**

*Barry Reisberg, Stefanie R. Auer, Isabel Monteiro, Emile Franssen,  
Sunnie Kenowsky*

Zachary and Elizabeth M. Fisher Alzheimer's Disease Education and  
Resources Program, New York University School of Medicine, New York, N.Y., USA

	<i>GDS3</i> <i>Mild</i>	<i>GDS4</i> <i>Moderate</i>	<i>GDS5</i> <i>Moderate-severe</i>	<i>GDS6</i> <i>Severe</i>	<i>GDS7</i> <i>Very severe</i>
<i>Approximate Developmental ages<sup>1</sup></i>	Adolescence	12 to 8 years	7 to 5 years	a. 5 years b. 4 years c. 24 months d. 54 to 36 months e. 36 to 24 months	a. 15 months b. 12 months c. 12 months d. 9 to 6 months e. 16 to 8 weeks f. 12 to 4 weeks
<i>Complexity of cognitive capacities<sup>2</sup></i>	Complex	Semi-complex	Simple	Very simple	Minimal
<i>Main ADL deficit<sup>1</sup></i>	Advanced ADL	Instrumental ADL	Instrumental & Basic ADL I	Basic ADL II	Motor activities
<i>Degree of Dependence<sup>3</sup></i>	None	Independent survival still attainable	Patient can no longer survive in the community without assistance	Requires total supervision	Requires continued assistance
<i>Intervention Stage<sup>4</sup></i>	Preliminary	I: Stimulation	II: Intervention	III: Partial charge	IV: Total charge

Global staging: effect on ADL and degrees of dependence



CME

# Practice parameter: Management of dementia (an evidence-based review)

Report of the Quality Standards Subcommittee of the  
American Academy of Neurology

R.S. Doody, MD, PhD; J.C. Stevens, MD; C. Beck, RN, PhD; R.M. Dubinsky, MD; J.A. Kaye, MD;  
L. Gwyther, MSW; R.C. Mohs, PhD; L.J. Thal, MD; P.J. Whitehouse, MD, PhD;  
S.T. DeKosky, MD; and J.L. Cummings, MD

- “Do educational interventions improve outcomes in patients and/or caregivers?”
- “Do other nonpharmacologic interventions improve outcomes in patients and/or caregivers?”

# AAN practice parameters

## FUNCTIONAL PERFORMANCE

- One standard: Behavior modification, scheduled toileting and prompted voiding.

- One guideline: Graded assistance, practice and positive reinforcement.

- Two practice options: (1) Intensive multi-modality group training; (2) Low lighting levels and music

## PROBLEM BEHAVIORS

- Two guidelines: (1) Music -particularly during meals and bathing; (2) Walking and other forms of light exercise.

# Graded assistance, skills practice, and positive reinforcement

- Guideline supported by one class I study, and by Class II, and class III data.
- Graded assistance: “a spectrum of assistance from verbal prompts to physical demonstration, physical guidance, partial physical assistance, and complete physical assistance aimed to provide the least amount of help possible” (Doody et al, 2001, p. 1163)

RETROGENESIS

Interaction of the GDS retrogenetic stages  
and the practice parameters of the AAN  
and positive approaches

**WHAT?**

**WHEN?**



<i>GDS4</i> <i>Moderate</i>	<i>GDS5</i> <i>Moderate-severe</i>	<i>GDS6</i> <i>Severe</i>	<i>GDS7</i> <i>Very severe</i>	<i>R</i>
<b>Walking or other forms of light exercise</b>	<b>Walking or other forms of light exercise</b>	<b>Walking or other forms of light exercise</b>		<b>G</b>
<b>Graded assistance (stimulation), practice and positive reinforcement</b>	<b>Graded assistance (intervention), practice and positive reinforcement</b>	<b>Graded assistance (partial charge), practice and positive reinforcement</b>	<b>Graded assistance (total charge)</b>	<b>G</b>
<b>Music (particularly during meals and bathing)</b>	<b>Music (particularly during meals and bathing)</b>	<b>Music (particularly during meals and bathing)</b>	<b>Music (particularly during meals and bathing)</b>	<b>G</b>
		<b>Behavior modification Scheduled toileting Prompted voiding</b>	<b>Behavior modification Scheduled toileting Prompted voiding</b>	<b>S</b>
<b>Intensive multi-modality group training</b>	<b>Intensive multi-modality group training</b>	<b>Intensive multi-modality group training</b>		<b>PO</b>
<b>Low lighting levels and music</b>	<b>Low lighting levels, music and simulated nature sounds</b>	<b>Low lighting levels, music and simulated nature sounds</b>	<b>Low lighting levels, music and simulated nature sounds</b>	<b>PO</b>

Interaction of practice parameters for dementia management of the QSS-AAN and the GDS retrogenetic stages

<i>GDS3</i> <i>Mild</i>	<i>GDS4</i> <i>Moderate</i>	<i>GDS5</i> <i>Moderate-severe</i>	<i>GDS6</i> <i>Severe</i>	<i>GDS7</i> <i>Very severe</i>
Significant social and educational activities	Significant social, recreational and household activities (practice & reinforcement)	Significant social, recreational, and household activities (practice & reinforcement)	Significant social, and recreational activities (practice & reinforcement)	Social contact
Physical activities	Physical activities	Physical activities	Active & passive physical activities	I: Active physical activities II: Passive physical activities
RO (advanced)	RO (standard)	RO (basic)		
Reminiscence and life-history work	Reminiscence and life-history work	Reminiscence and life-history work		
	Validation (Anosognosia)	Validation (Anosognosia)	Validation (Anosognosia)	
	Emotional reminiscence	Emotional reminiscence	Emotional reminiscence	Emotional reminiscence
	Cognitive therapy and group training	Cognitive therapy and group training	Cognitive therapy and group training	
	Environmental adaptation	Environmental adaptation	Environmental adaptation	Environmental adaptation

Interaction of positive approaches to dementia care and the GDS stages