



Kennedy Krieger Institute



JOHNS HOPKINS
MEDICINE

Catatonia in Autism

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Interagency Autism Coordinating Committee Meeting

Lee Elizabeth Wachtel, MD
Kennedy Krieger Institute
Associate Professor of Psychiatry
Johns Hopkins School of Medicine
Baltimore, Maryland, USA

Disclosures

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Objectives

- Discuss the concomitance of catatonia in autism
- Explain catatonia
- Present the range of symptoms and “faces” of catatonia, including repetitive self-injurious behavior
- Gather support for future research

Catatonia and Autism

- 3 population-based studies report catatonia in 12-18% of autistic patients
- **Wing & Shah, 2000, UK.**
 - 506 children and adults with autism evaluated
 - 17% met criteria for catatonia
 - Led to WS Autistic Catatonia Criteria
- **Billstedt, Gillberg & Gillberg, 2005, Sweden.**
 - 120 patients dx'ed autism in childhood and followed for 13-22 years
 - 12% dx'ed with catatonia (50% SIB – 19% extreme violence – 23% tics)
- **Ghaziuddin, Dhossche & Marcotte, 2012, US.**
 - 101 patients <18 yo
 - Dxs: PDD, Psychosis NOS, IED, MR, Catatonia, NMS
 - 17.8% met criteria for catatonia - only 2 previously diagnosed

Early recognition in autism

"[Around the onset of puberty] the children changed: they became immobile, more shy, taciturn, went off by themselves, avoided their playmates, became 'couch potatoes,' hated to leave the house."

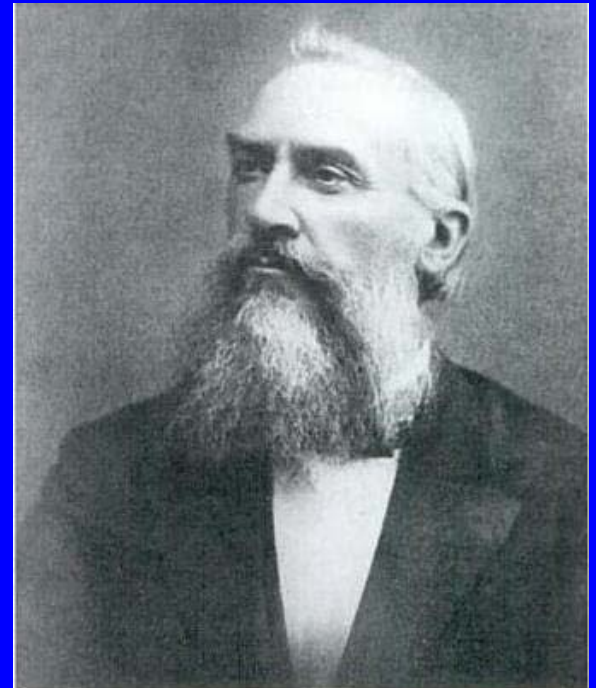
*"Gradually catatonic-hebephrenic symptoms began to predominate. . . The patients assumed eccentric **postures**, **froze** for brief periods in one position, **refused food**. They became ever more **inaccessible** and **negativistic**. In this particular phase of the illness the diurnal variation was striking: during the day they were lazy and inactive, lay mostly in bed, and had contact with no one. In the evenings they became loud . . . and **agitated**. Typical for many of them was their **tendency to self-injury**: they beat their heads against the wall or the bedstead, placed themselves in bed so, that their necks rested on the bedframe, pressed on their eyeballs, throttled themselves with their hands. . .*

Cata-what?

- Coined in 1874 by Karl Kahlbaum
- Clustered distinct:

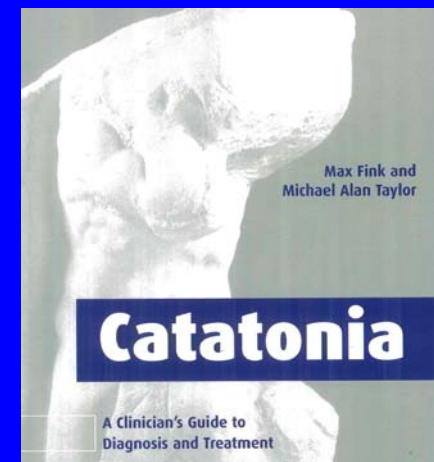
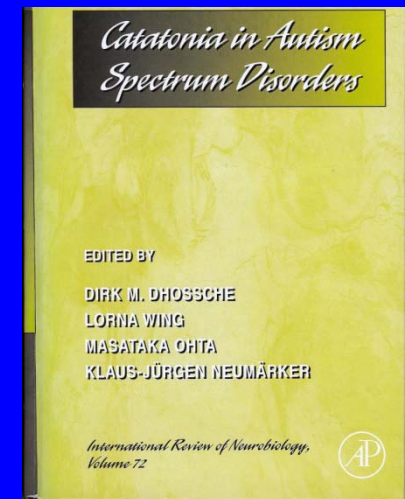
Motor,
Vocal and
Affective symptoms

into one disease entity.



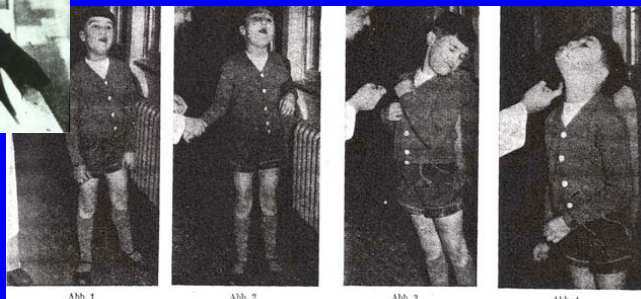
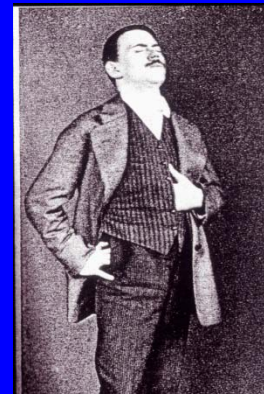
Common Catatonic Symptoms

- Immobility/rigidity
- Stupor
- Mutism
- Posturing
- Echophenomena
- Grimacing
- Physical excitement
- Combativeness
- Stereotypy
- Negativism
- Autonomic instability

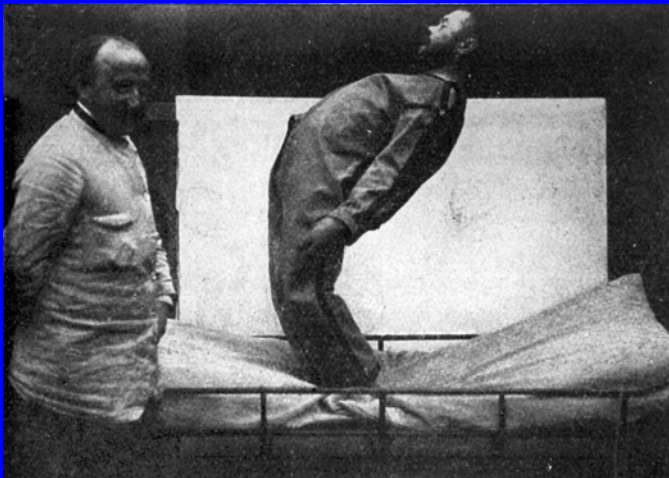


Challenging History

- Erroneously purloined by schizophrenia diagnosis
- Extensively documented
 - Including lethal malignant forms
- Receives separate classification only in DSM-V



History returns in today's autism



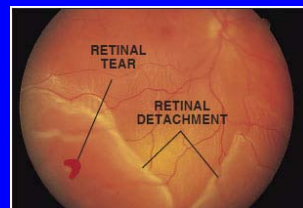
DIRECT IMPACT

- Inability to move
- Dehydration/malnutrition
- Inability to void
- Autonomic and thermoregulatory instability
- Severe tissue damage from repetitive SIB



Additional Vexing Symptoms

- Wing-Shah Autistic Catatonia Criteria:
 - Increased **slowness** in movement and vocalization
 - **Difficulty** initiating and completing tasks
 - Increased **prompt dependence**
 - **Passivity**/amotivation
- ➡ Prominent functional deterioration



FUNCTIONAL REGRESSION IN AUTISTIC CATATONIA



██████████'s painting - JULY 2009



[REDACTED] painting - MAY 2011

Concomitant Posturing and immobility



talk about REGRESSION

On April 27, 2011 [REDACTED] orally read the following snip-It. It took him 23 seconds to read it outloud. He read it fluently, with inflection, and without hesitation:

"A post office is a place that takes care of mail. People go to a post office to mail letters and packages. You can buy stamps there, too. Every letter and package is sorted at the post office. A postal carrier takes your mail to your mailbox. Some mail is sent to far away places by plane, train or truck."

On July 12, 2011 it took [REDACTED] 15 minutes to orally read the following word:
"butter"

He looked at the word and pointed to it repeatedly, then looking at me. It appeared that his mouth was attempting to form the beginning of the word, but he could not say it. He finally uttered the word in response to extensive cues.

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On April 27, 2011 it took [REDACTED] 26 seconds to independently generate and write the following answer to a comprehension question:

"People can mail letters and packages at a post office."

On April 27, 2011 it took [REDACTED] 23 seconds to independently write the following entry into his journal:

"I saw Judy. I read a paragraph and answered comprehension questions."

On July 12, 2011, it took [REDACTED] 17 minutes to write following word:
"train."

It required over 50 cues plus hand-over-hand assistance and redirection.

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SIB* as a symptom of catatonia

- Concept dating back to 1849
- Largely ignored due to “Kraepelin’s error” and later absorption of SIB into ABA theory
- Hypothesized in 2010 by Wachtel & Dhossche
- Expanding international literature
- Incorporated in 2013 by Fink in “*Rediscovering Catatonia: Biography of Treatable Syndrome*”

*SIB determined to be of no operant function

Treatment of Catatonia

- Incredibly simple ☺
- Catatonia Treatment Paradigms:
 - Benzodiazepines in increasing dosages
 - Lorazepam challenge test of 1mg PO/IM/IV
 - Dosages ranging from 12-18mg/day common
 - Avoidance of offending agents, namely antipsychotics
 - Electroconvulsive therapy (ECT)

Demonstrative Video

Parental perspective

- We lost our son twice, once to Autism at 2 years old and then to Catatonia at 19 years old. We finally found an answer and help for our son. I nicknamed catatonia “the beast” because of the way it takes over my son completely. He had trouble doing mostly everything including eating. This is real and very ugly. It took over his life and basically our lives also. We finally have our son back.
- He is having periods of calm like we have never seen before. One staff person said it best “I got to see the real P. for the first time.” His cognitive skills have definitely improved. He is much more capable of having an intention and being able to act on it from start to finish. Most nights he is sleeping well some nights with restraints off having no SIB in his sleep.. he seems to have **periods of real joy and happiness** where he can be very playful and engaging - it's beautiful to see, really remarkable. I have to say that **seeing how good he can be is a gift we were never sure we would see (I can't imagine how he must feel inside).**

Take-home message

- Catatonia afflicts many people with autism
- Catatonic symptoms wreak havoc
- Catatonia is readily diagnosed
- Catatonia is readily treated
- Ongoing research is imperative

“There is no use trying,” said Alice; “one can’t believe impossible things.”

“I dare say you haven’t had much practice,” said the Queen.

“When I was your age, I always did it for half an hour a day.

Why, sometimes I’ve believed as many as six impossible things before breakfast.”

Lewis Carroll
Through the Looking Glass

"Nous ferions davantage de choses si nous en savions moins d'impossible."

Le Marquis de Condorcet