PSYCHOLOGY OF DUCHENNE: LEARNING AND BEHAVIOR MUSCLE AND BRAIN

Dr. J. Hendriksen PhD

The AVERAGE BOY/MAN with DMD does not exist
EVERY BOY/MAN IS UNIQUE: with his own strenghts and deficits
NON-MOTOR PROBLEMS play an unexpected important role
PART 1:
GROWING UP WITH DUCHENNE

.. Of all the health related instruments only the PEDSQL neuromuscular and the PARS-III have been validated specifically in a pediatric DMD population
PSYCHOSOCIAL ADJUSTMENT IN 322 BOYS AND MEN WITH DUCHENNE


Psychosocial Adjustment in Males with Duchenne Muscular Dystrophy: Psychometric Properties and Clinical Utility of a Parent-report Questionnaire

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Eric G. H. Schouten,5 PhD, Albert P. Aldenkamp,6 PhD, and Johan S. H. Witz7 PhD, MD

1Kampenhout Bergslag Centre, Nieuwelinde, Nijkerk, Netherlands; 2Childhood Rehabilitation Centre, St. Jans-Capelle, Netherlands; 3Department of Psychology, University Hospital Maastricht, "Duyfek College of Medicine, Texas Children’s Hospital and 5Department of Psychology, Maastricht University; 4Department of Psychology, University Hospital Maastricht, "Duyfek College of Medicine, Texas Children’s Hospital.

PREDNISONE AND DEFALCASON IN DUCHENNE MUSCULAR DYSTROPHY: DO THEY PLAY A DIFFERENT ROLE IN CHILD BEHAVIOR AND PERCEIVED QUALITY OF LIFE?

June 17, 2006 - Muscular Dystrophy

Citation

Sierko S, Buckon C, Fowler E, Bigley A, Stautt L, Sison-Williamson M, Zebracki K,

Hinton et al 2006,
Hendriksen et al 2008,
Buckon et al 2016
PART 2: BRAIN INVOLVEMENT: COGNITION, LEARNING AND BEHAVIOR

Ricotti et al 2016: DYSTROPHIN ASSOCIATED NEURODEVELOPMENTAL DISORDERS:
SCHRANS & HENDRIKSEN
2012 review

77 STUDIES (1954 – 2012);
N= 377 BOYS

<table>
<thead>
<tr>
<th>IQ Type</th>
<th>Score</th>
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<tbody>
<tr>
<td>Wechsler Total IQ</td>
<td>88</td>
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<tr>
<td>Wechsler Performance IQ</td>
<td>93</td>
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<tr>
<td>Wechsler Verbal IQ</td>
<td>88</td>
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</table>

DUCHENNE & DYSLEXIA: 27%
General population: 3%

Are Males With Duchenne Muscular Dystrophy at Risk for Reading Disabilities?
Jos G.M. Hendriksen, PhD* and Johan S.H. Vles, PhD, MD†
DUCHENNE & ADHD: 29%
General population 7%

Original article
Diagnostic overshadowing in a population of children with neurological disabilities: A cross sectional descriptive study on acquired ADHD
J.G.M. Hendriksen \^\textsuperscript{a,b}, J.C.A.W. Peijnenborgh \^\textsuperscript{a}, A.P. Aldenkamp \^\textsuperscript{a,b}, J.S.H. Vles \^\textsuperscript{a,b}

DUCHENNE & AUTISM: 5%
General population: 0.1%

Original Article
Neuropsychiatric Disorders in Males With Duchenne Muscular Dystrophy: Frequency Rate of Attention-Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder, and Obsessive–Compulsive Disorder
Joseph G. M. Hendriksen, PhD, and Johan S. H. Vles, MD, PhD
### STANDARD DIAGNOSTIC PROTOCOL

<table>
<thead>
<tr>
<th>AGE</th>
<th>0-6</th>
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<tr>
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<td>ATTENTION</td>
<td>READING MATH</td>
<td>SCHOOL PLANNING</td>
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<td>BEHAVIOR</td>
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<td>ADHD</td>
<td>OCD</td>
<td>ANXIETY</td>
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<td>IDENTITY SOCIAL</td>
<td>TRANSITION ACCEPTING DEPRESSION</td>
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</table>

### TREATMENT OPTIONS

**OVERVIEW:**
- Boys/men:
  - Psycho education
  - Psychotherapy/behavior therapy
  - Cognitive training
  - Psychopharmaca

- Parents:
  - Psycho education
  - Parent training

- School/therap:
  - Psycho education
  - Behavior therapy
Report on a clinical significant and positive effect of Fluoxetine on OCD behavior.
Thank you very much for your attention

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