

TRIPLE A

ASD, ADHD or Attachment Disorder





- Overview of these neuro developmental conditions (new morbidities)
- Brief update – research, guidelines and local management options
- Current CMDHB approach- clinical nurse specialists to present
- Open for discussion

Referrals



- Speech delay ? Autism
- Disruptive behaviour, asked to leave kindy ?ADHD ? Aspergers
- 7 years- father says school concerned about learning and speech,normal looking child, not hyperactive but probably has ADD Dx developmental dyslexia

The new morbidities



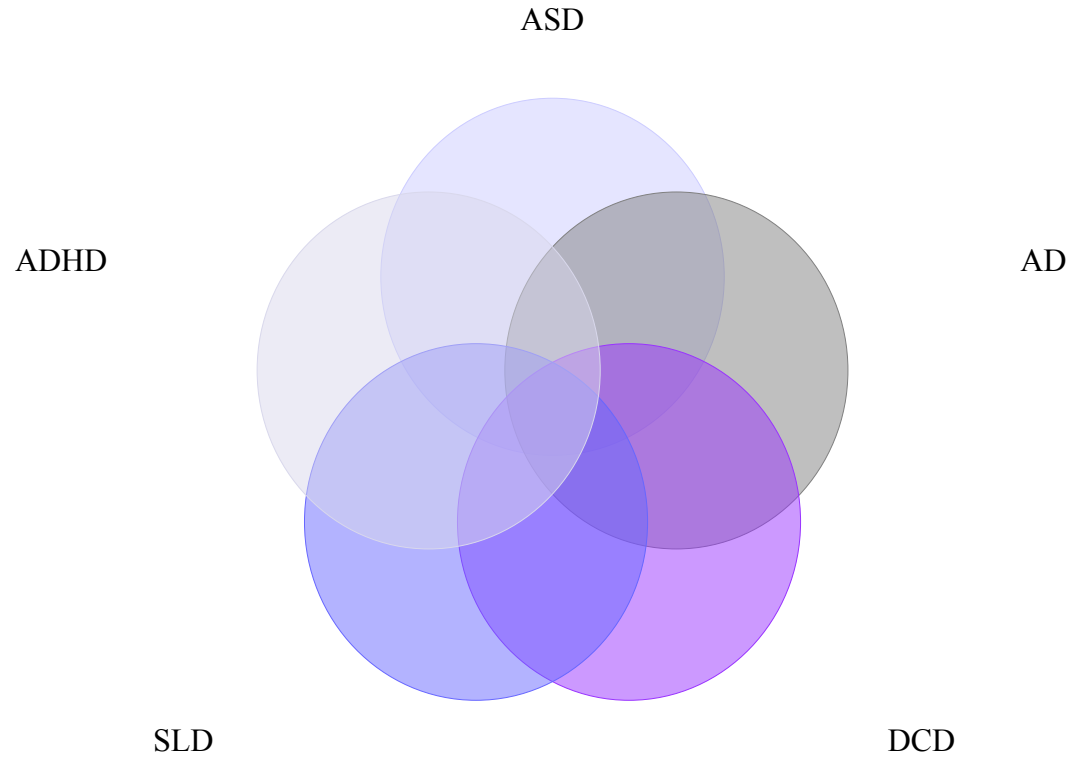
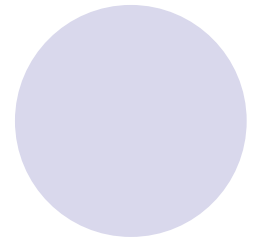
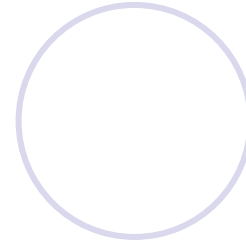
- neuro developmental disorders of learning and behaviour
- previously seen as brain damage/ minimal brain dysfunction
- behavioural criteria established DSM/ICD or other Gillbergs criteria for Asperger Syndrome

Comorbidity

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- Coexistence of problems- criteria overlap, different names for one problem, shared genetic risk, shared environmental risk,

With apologies to Gillberg





ADHD/ADD

**They do not reflect but jump
where angels fear to tread**

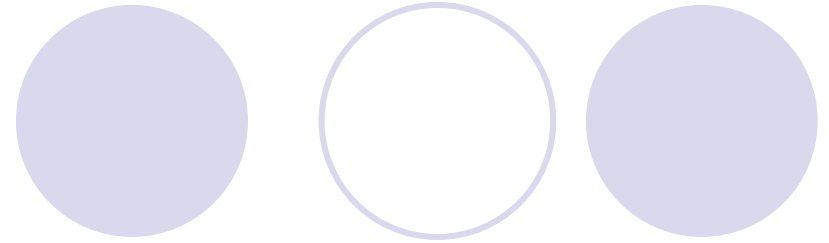


Consensus core symptoms

- Inattention
- Impulsivity
- Overactivity

Descriptive not explanatory

The simple story



variant alleles of dopamine genes



reduced synaptic transmission



reduced response inhibition/reward



impulsive inattentive behaviour

Prevalence

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- 3-5 % children
- 5-7 % male
- 1-3 % female
- low SE slightly higher
- all countries, all ethnic groups

Incidence

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- 0.5/1000 UK/Europe (Eric Taylor 1970s)
- 3/1000 UK medicated in late 1990's
- 35/1000 USA



Aetiology

- **Neurodevelopmental**-definite dopamine pathways
- **Genetic**-molecular genetics=high risk alleles eg DRD4, DAT1
 - heritability- concordance MZ twins .82(.52-.98), siblings 35%, parents 40%

Environmental

Probable environmental associations

- Pregnancy-nicotine (Mankin et al 1991, Canadian unselected 6-9 yr olds, N=91, Conners scores x 3 higher if mother smoking in pregnancy), *alcohol* (risk may be increased if infant has DRD4), *anticonvulsants, cocaine, lead, maternal anxiety* (O'Conner et al 2002)
- Perinatal- *low birth weight, prematurity*
- Infancy- *attachment problems(reactive/disinhibited) neglect, socioeconomic adversity, nutrition*
- Childhood- *course influenced by exclusion, hostility, school hostile EE expressive emotion*

Diagnosis



- DSM IV ADHD-pred hyperactive
- ADHD-pred inattentive
- ADHD- combined type



Types of ADHD
IMPULSIVE

- INHIBITION
- motor
- boys >>> girls
- language/speech disorder
- social rejection
- BEHAVIOUR
- aggression
- Early referral
- family discord
- MEDICATION Behaviour



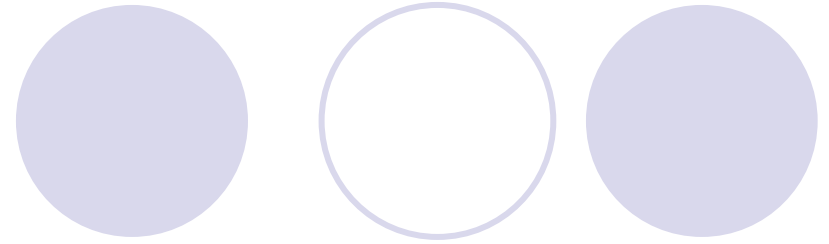
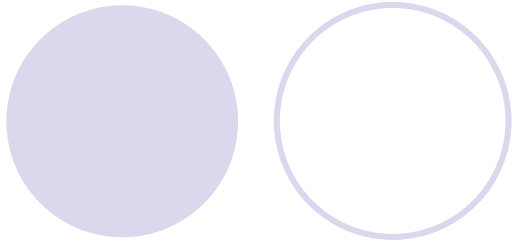
INATTENTIVE

- ORGANISING
- memory/planning
- boys >= girls
- subtle language / speech
- social reticence
- LEARNING
- anxiety/sadness
- Late referral
- family stress
- Organisation
- Medication



Assessment

- Hx- from parents, PHx, FHx
 - from child
 - from teacher
- Examination- observation, neurological and neurodevelopmental,



- Behaviour rating scales SDQ (B4S)
CBCCL-Archenbach
Conners Rating Scale-
long

Narrower-

Conners (short)
Brown ADD Scale
ADHD Rating Scale

(Univ of Mass.)



- Objective testing – educational achievement tests WIAT

cognitive/neuropsychological
/ WISC/NEPSY

verbal/nonverbal/working
memory/processing speed/ executive
function

language

Differential diagnosis



- ID
- SLD
- hearing
- neurological, epilepsy
- family disruption
- abuse
- depression
- attachment
- ASD/Asperger
- Tics
- Anxiety/depression



Common types of comorbidity

- Learning disability/ID
- PDD/ASD
- Tourette/tic disorder
- Coordination problems-DCD
- Epilepsy
- Attachment disorder-AD
- Conduct and ODD
- Family adversity
- Anxiety/Depression
- Specific learning disorder/ reading disorder



Specific Learning Difficulties

- Language abnormalities and ADHD(P. Hutchins, Sydney), subtleties of language, expressive and semantic, ?failure of inner language, (“to talk to themselves” doesn’t work very well), but haven’t found any language deficits in fMRI
- Reading problems, after 7 yrs ADHD and RP develop independently, association ? due to early genetic and environmental influences

Management



- 1/ Education-SENCO, RTLB,RLit, GSE (EI and school focus)
- 2/ Behavioural –parenting programmes eg Incredible Years, social skills groups, indiv therapy- CBT

CORE PRINCIPLES

- immediacy of consequences
- frequency of consequences
- saliency of consequences
- change rewards frequently
- positives before negatives
- anticipate problems

- keeping a disability perspective
- maintain a sense of priorities
- don't personalise the child's problems



3/ medication

- Medication- 70-80% response
 - Stimulants - methylphenidate(Rubifen, Rubifen SR/Ritalin SR/LA, Concerta,)
 - - dexamphetamine
- Others: Clonidine(Dixirit)
- Amoxetine(Strattera)

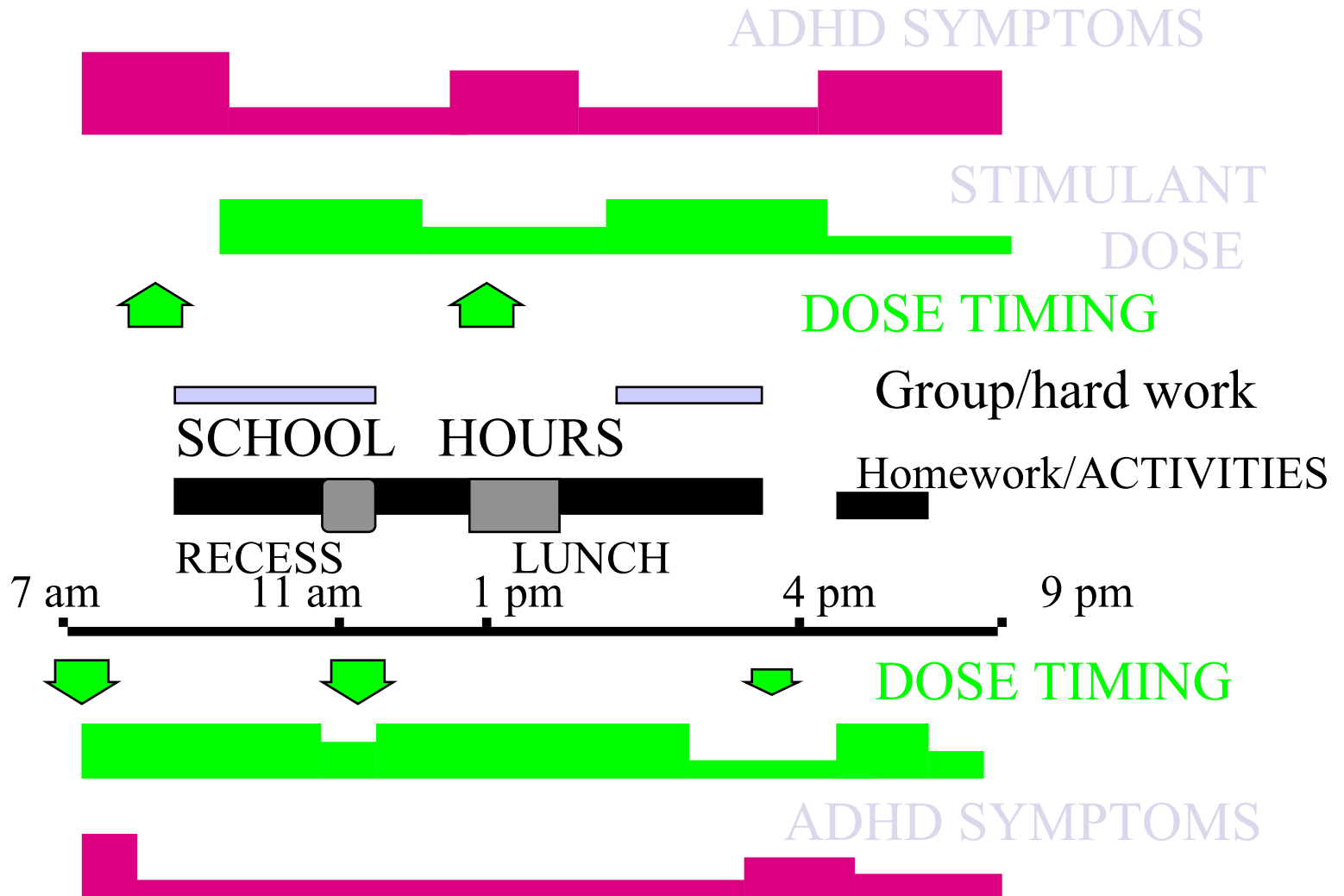


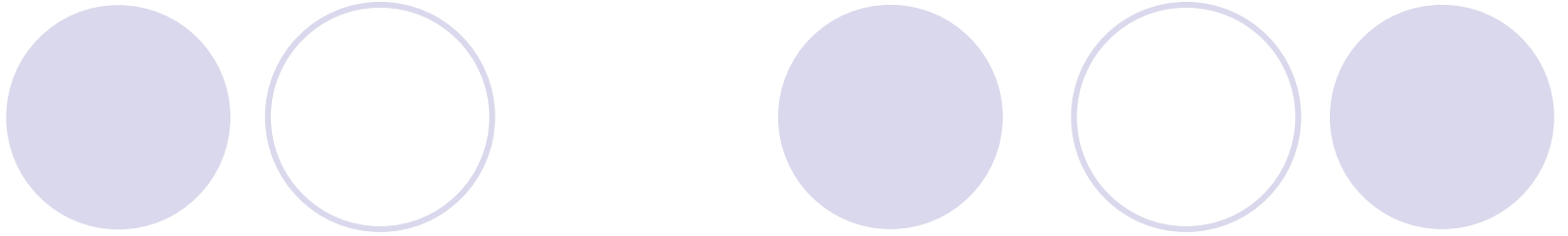
- Trial-increase dose slowly until therapeutic response or side effects
- Monitor effect with rating scales, teacher report

MEDICATION and other useful stuff

- <4 yrs less literature
- < 4-5 yrs use behavioural support and interventions
- but social learning does begin at kindy, may do disservice not to treat, if slow down more socially sensitive(Prof Eric Taylor)
- Can re trial Rx again if don't work early on
- Diurnal variation= real effect, reduced drug responsiveness in afternoon not due to tolerance, just don't get as good a response in pm

Tuning Medication to Activities & Teaching



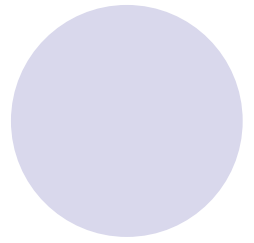
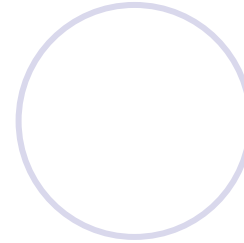
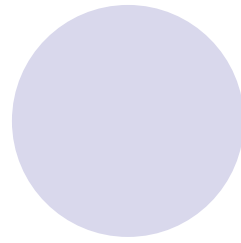
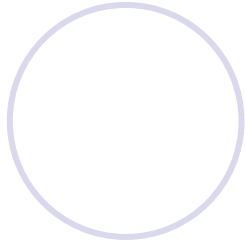
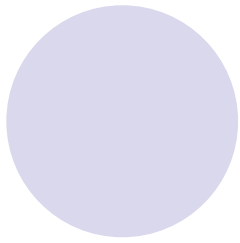


- MTA at 8 years: prospective followup of children treated for combined-type ADHD in a multisite study
- Type or intensity of 14 months of treatment at 7-9.9 yrs doesn't predict functioning 6-8 yrs later

CMDHB assessments



- Kidzfirst Dev Disability Clinic <5 years or > 5yrs if comorbid developmental problem, significant learning problems , previous involvement
- Whirinaki CAMHS 5 + years, +/- ODD/CD



- NZ guidelines for the assessment and treatment of ADHD, Min of Health, 2001
- www.moh.govt.nz
- NICE guidelines
- www.nice.org.uk
- RACP Chapter of Community Child Health ,
Developmental and Behavioural SIG guidelines
- www.werrycentre.org.nz
- Evidenced based review of interventions 2008



Local resources

- www.adhd.org.nz
- www.adhd.co.nz

- Incredible Years(CAMHS,GSE, Te Hononga-Family Works)
- Social Skills training (CAMHS, schools/RTLB, GSE)
- CBT - CAMHS

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AUTISM SPECTRUM DISORDER

Another presentation

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Attachment Disorder

Ask the new CMDHB IMH
Service to talk