General Aging in Intellectual and Developmental Disabilities

Aging with Down Syndrome

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Accelerated Aging in Down Syndrome (DS)

- DS is the result of 3 copies of chromosome 21

- Multiple genes on chromosome 21 have also been linked to middle-aged and older adults showing changes of premature or “accelerated” aging

Source: www.hhmi.org
Common Conditions in Older Adults with DS

- Alzheimer’s disease
- Hypothyroidism
- Sensory deficits
  - Early/aggressive cataracts
  - Hearing loss
- Early menopause
- Atlantoaxial instability
- Cervical spine disease
- Obstructive sleep apnea
- Osteoarthritis
- Decrease in functional ability
- Osteoporosis
- Celiac disease

Used with permission from the National Down Syndrome Society, Aging and Down Syndrome Guidebook; copies available at no charge, info@ndss.org.
Hypothyroidism

- Thyroid dysfunction is very common in adults with Down syndrome.
- Can lead to symptoms of: fatigue, men sluggishness, weight fluctuations and irritability.
- Detected via blood test.
- Treated with oral replacement.
Sensory Losses

- Vision impairment:
  - Early/aggressive cataracts
  - Keratoconus
- Hearing impairment:
  - Conductive hearing loss
  - Small ear canals, wax impaction
- Frequently mistaken as stubbornness, confusion, disorientation
- Correctable! Treatable!
Atlantoaxial Instability and C-spine Concerns

Source: www.dsmig.org.uk
Atlantoaxial Instability and C-spine Concerns

- Gait disturbance
- Spasticity
- Change in bowel or bladder function
- Pain
- Screening x-rays recommended in adulthood
- More expert investigation if new/sudden change in symptoms
Obstructive Sleep Apnea

- **Signs include**: snoring, gasping noises, daytime sleepiness, morning fatigue, difficulty getting out of bed, excessive napping and fragmented sleep

- **Undiagnosed or untreated apnea** leads to symptoms of irritability, poor concentration, behavior changes, impaired attention, as well as strain on heart/lungs

- **Diagnosis**: sleep study
Osteoarthritis

- Hyperflexibility plus wear-and-tear
- Obesity
- Pain, limited mobility, decreased participation in activities
- Misinterpreted as confusion, behavioral changes
- Pain reporting can be variable

Source: www.mayoclinic.org
Celiac Disease

- Autoimmune disease due to reaction to wheat/gluten products
- Causes damage to lining of intestine, poor absorption of nutrients
- Higher prevalence in adults with DS
- Can be screened via blood test
- GI referral to confirm diagnosis

Source: www.ei-resource.org
Osteoporosis

- Bone thinning – leads to fracture
- Risk factors
  - Immobility
  - Low body mass
  - Family history of osteoporosis
  - Early menopause
  - Longtime exposure to certain anti-seizure medications
- Screened via bone density test

Source: www.mdguidelines.com
Obesity and Functional Decline

- Decreased metabolism in adults with DS
- Inconsistent access to exercise
- Variability in dietary options and healthy food choices
- Changing culture to change behavior
- Role modeling healthy habits is good for everyone involved (caregivers too!)
Additional Webinars on Aging with IDD

General Aging in Intellectual and Developmental Disabilities
- Understanding Age Related Changes
- The Role of Polypharmacy
- Identifying and Assessing Pain
- Behavior Related Changes and Aging in Adults with IDD
- Health Promotion and Aging in Adults with IDD
- Mobility and Aging in Adults with IDD
- Aging with Down Syndrome
- Aging and Cerebral Palsy

Dementia and Intellectual and Developmental Disabilities
- Introduction to Dementia and Aging with IDD
- Early Evaluation of Dementia and Alzheimer’s Disease
- Stages of Alzheimer’s Disease
- Applying the Knowledge to Dementia Caregiving and Caregiver Support
- Caregiving in Action: Case Studies and Practical Tips
Additional Aging with IDD Resources

Massachusetts Department of Developmental Services (DDS)

Center for Developmental Disabilities Evaluation & Research
http://shriver.umassmed.edu/cdder/aging_idd_education
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