Practical Tips for Physically Disabled Patients in the Office

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Challenge of Managing Physical Disabilities

• Low prevalence (Lee et al, 2011)
• Little training (Lee et al, 2011)
• Office inaccessibility (McColl, 2008)
• Systemic (McColl, 2008)

Population

• Difficulty with ADLs
• Impairments in basic bodily functions (i.e. bladder, bowel)
• Locomotive difficulties
• Complex secondary conditions
  eg. Spinal cord injury, MS, MD, stroke

Objective: To learn approaches to common conditions in physically disabled patients:
1. Neurogenic bladder
2. Neurogenic bowel
3. Spasticity
4. Autonomic dysreflexia
5. Sexual health
6. Mobility
7. General health

Case 1

John is 30 years old and had a MVA 5 years ago in which he had a complete spinal cord injury at T5. He is concerned he has another UTI and wants antibiotics. His chart shows he has received antibiotics 4 times this year for UTI.

What else would be important to know?
What should be done?

What else would be important to know?
• What is his method of bladder management?
  – Eg. Clean intermittent self catheterization
• Symptoms of UTI (physical):
  – Fever
  – Increased spasms
  – Change in urine (cloudy, blood, sediment)
  – Incontinence
  – Malaise, lethargy, unwell
  – Abdominal discomfort
• Did he actually have symptomatic UTIs in past?

What should be done?
• Urine dip?
• Urine R&M, C&S
• Treat with antibiotics?
• Review urinary routine
• Send to urologist?
Neurogenic Bladder: UTI

- Significant bacteriuria with some of:
  - Leukocytes in the urine
  - Discomfort/pain over kidneys, bladder or during urination
  - Onset of urinary incontinence
  - Fever
  - Increased spasticity
  - Cloudy urine with increased odour
  - Malaise, lethargy or sense of unease

SCIRE, 2011

Significant Bacteriuria

<table>
<thead>
<tr>
<th>Method Urinary Drainage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermittent catheterization</td>
<td>≥ 10^7 cfu/mL</td>
</tr>
<tr>
<td>Condom catheter</td>
<td>≥ 10^9 cfu/mL</td>
</tr>
<tr>
<td>Indwelling/suprapubic catheter</td>
<td>Any detectable concentration</td>
</tr>
<tr>
<td>Spontaneous urination</td>
<td>≥ 10^7 cfu/mL</td>
</tr>
</tbody>
</table>

Look for lower counts!

Neurogenic Bladder: UTI

Key Points

- Symptoms may be different
- Asymptomatic bacteriuria common (catheterization)
- C&S gold standard
- May refrigerate urine for 24 hr
- Urology referral for > 3 UTIs; persistent hematuria
- Antibiotic prophylaxis by specialist

Case 2

Mary is 50 yo who was diagnosed with primary progressive MS 10 years ago. She is able to walk short distances and uses a manual wheelchair for longer distances. She comes to the office reporting abdominal distension and bloating for 3 weeks.

What else would be important to know?

- Red flags:
  - E.g. Bleeding, weight loss, fever, pain
- Bowel routine:
  - Digital stimulation
  - Bowel needs
  - Medications and dietary intake:
  - Other meds
  - Fibre and fluids
  - Changes in overall condition

What should be done?

- Physical exam: Abd and DNC
- Consider Abd tap
- Bowel routine
  - Encourage timing routine daily or every 2nd day
  - Add 15-30 gm fibre per day
  - Colace
  - "Magic bullets" (laxatives/polyethylene glycol base vs. bisacodyl
  - hydrogenated vegetable oil base)(Loew et al, 1994)
  - Consider adding PEG 3350
  - Handout on diet
  - bowel diary

Primary Care Monitoring

- Annual creatinine, eGFR (Middleton, 2002)
- Consider ultrasound every 1-2 years (NICE, 2004)
- Consider urology referral & urodynamics
- Cystoscopy after 10-15 years if indwelling or suprapubic catheters (5X increased risk bladder cancer)(SCIRE, 2011)

Neurogenic Bladder: Long Term

Goals:

- prevent high pressures to upper tract (kidneys, ureters)
- avoid bladder distension
- prevent urinary tract infections
- maintain continence


Primary Care Monitoring

- Annual creatinine, eGFR (Middleton, 2002)
- Consider ultrasound every 1-2 years (NICE, 2004)
- Consider urology referral & urodynamics
- Cystoscopy after 10-15 years if indwelling or suprapubic catheters (5X increased risk bladder cancer)(SCIRE, 2011)
Bob is a 52-year-old who suffered a stroke 3 years ago with spastic L hemiplegia. He is able to walk short distance with a quad cane but uses a wheelchair for longer distance. He is seeing you as his spasticity is bothersome and he was wondering if you would prescribe medical marijuana.

What else would be important to know?
What should be done?

**Spasticity Etiology**
- Infection (UTI)
- Noxious stimuli (constipation, ulcer, fracture)
- Disease progression (MS exacerbation, syringomyelia)
- Medication or not taking

**Spasticity Management**
- Non-Pharmacological:
  - Passive stretching
  - Active exercise
  - Seating assessment
  - TNS
- Pharmacological:
  - Oral medications
  - Intrathecal baclofen
  - Local injections (botulinum toxin, phenol)

**Cannabinoids**
- Anecdotal reports but limited evidence for spasticity in MS, SCI (Health Canada, 2013)(SCIRE, 2011)
- Marijuana Medical Access Regulations (MMAR)
  - severe pain and persistent muscle spasm in SCI and MS who have not or would not benefit from conventional treatments (Health Canada, 2013)
Cannabinoids

• College regulation
• Conventional treatments
• Understand use in condition
• Not obliged to complete
• Informed consent documented

Key Points

• Treat if interfering with function
• Investigate etiology
• Refer if spasticity refractory
• Medical marijuana -indications, motivations, risks, benefits, informed consent

Case 4

Alan, age 25, is a C7 tetraplegic patient from a MVA 1 year ago. He comes to you bothered by periodic headaches and sweatiness.

What else would be important to know? What should be done?

What should be done?

• Baseline (BP, HR)
  - 100/60, 80 bpm
• Education
  - Signs and symptoms of autonomic dysreflexia (AD)
  - Management of AD
  - Review bowel and bladder regimes
  - AD wallet card
• Home BP machine
• Refer to physiatrist?
• Medications
  - Consider medication to treat Autonomic Dysreflexia

Autonomic Dysreflexia

“Serious, potential life threatening condition arising from below lesion at T6 or above, characterized by increased BP and risk of seizure, stroke, death”

Key Points

• Potential life threatening condition
• Unopposed sympathetic activity triggered by noxious stimulus below level of injury
• Relieve noxious stimulus
• Refer if severe, frequent
• Prevention

Case 5

Jim, age 46, has relapsing remitting MS and has come to see you regarding troubles with erectile dysfunction. He wonders about trying tadalafil (Cialis) after seeing commercials.

What else would be important to know? What can be done?

What should be done?

• Baseline (BP, HR)
  - 100/60, 80 bpm
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  - Signs and symptoms of autonomic dysreflexia (AD)
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Autonomic Dysreflexia

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Key Points

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What else would be important?
• Usual questions in regards to sexual dysfunction with special focus on:
  – Sensory and motor issues
  – Medications
  – Mood
  – Substances
  – Secondary issues (urinary, bowel, AD)
• Safety
• General health
• Fertility
• If desired or contraception.

What can be done?
• Physical exam
  – BP, HR
  – Cardiovascular
  – Urogenital?
• Investigations
  – CBC, FBS, cholesterol, ECG, Cr
• Education
  – About the issue and perhaps related to physical disability
  – Fertility, contraception, safety
• Medication
  – PDE5i
• Referral?

Sexual Health

Women
• Less & delayed orgasm
• Decreased lubrication
• Fertility

Men
• Erectile dysfunction

Pregnancy Issues
• Bladder, kidney infections
• Thrombosis

Key Points
• Important to patients
• Physicians often don’t ask
• Unique issues
• Same medications as able-bodied
• Fertility and pregnancy concerns
• Referral

Case 6
Jane is a 40 year old female with myotonic dystrophy. She and her husband report gradually worse balance and some falls. She has found she does better using the shopping cart at the grocery store, so has borrowed her father’s wheeled walker. She has brought in the walker and finds that it helps but doesn’t think it’s the right size.

What can you do?

Mobility
• Fitting Cane & Walker
  • 20-30° flexion of elbow or to height of wrist crease
**References**


- Rutkowski, M. Bowel dysfunction in persons with multiple sclerosis. Constipation 


- Gulick, RJ. Treatment of opportunistic infections in HIV disease. HIV 


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