20 Years’ Experience in a VA SCI Colorectal Clinic

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Disclosures

- Presenter has no interest to disclose.

- PESG and PVA staff have no interest to disclose.

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**Learning Objectives**

At the conclusion of this activity, the participant will be able to:

- Discuss the different use of hemorrhoid ligation in spinal cord injury, compared with the general population.

- Discuss the value and limitations of a flexible sigmoidoscopy screening program in a spinal cord injury unit.

- Discuss the value and limitations of a spinal cord injury colorectal procedures clinic.
SCI Colorectal

Outline

- History / rationale
- Population
  - Colostomy
- Procedures
  - Sigmoidoscopy
    - Adenoma detection rate
  - Hemorrhoid banding
    - Multiple ligation
- Non-futility
- Limitations / conclusions
SCI Colorectal

Outline

- **History / rationale**
- **Population**
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  - Sigmoidoscopy
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    - Multiple ligation
- **Non-futility**
- **Limitations / conclusions**
Palo Alto to San Diego

- Unique in 1980s
- Colorectal issues in chronic SCI
  - ~75% have hemorrhoidal bleeding
    - Multiple ligation safe & effective
  - Prolonged transit time, anorectal dyssynergia
    - Colostomy for intractable bowel care difficulty
- SD clinic started 1995
Rationale

- Colorectal issues distinct
- SCI unit facilities superior
  - More room
  - Lifts
  - Experienced staff
1995-2015

- Weekly clinic with cart, resident
  - Inpt & outpt
- Flexible sigmoidoscopy
- Hemorrhoid banding
- Discuss colostomy
- Other issues
  - Fissure / fistula
  - Surgical f/u
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Population

641 veterans

- 98% male
- Age 56 ± 13, range 21-90
- Duration of injury at 1st visit 19 ± 15 (0-58)
  • Almost all chronic
- 1208 visits (1-11/pt)
  • 66% inpt
## Population

**Causes of SCI**

- Mostly traumatic

<table>
<thead>
<tr>
<th>Cause</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI, traumatic or vascular (level assignable)</td>
<td>601</td>
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<tr>
<td>MS</td>
<td>30</td>
</tr>
<tr>
<td>ALS, post-polio, &amp; other syndromes</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>641</strong></td>
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</tbody>
</table>
Population

Level of SCI

- ~50% tetraplegic
Population

Degree of SCI
- ~50% complete (ASIA A)

<table>
<thead>
<tr>
<th>Degree</th>
<th>Count</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>ASIA A</td>
<td>288</td>
<td>48%</td>
</tr>
<tr>
<td>B</td>
<td>67</td>
<td>11%</td>
</tr>
<tr>
<td>C</td>
<td>82</td>
<td>14%</td>
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<tr>
<td>D</td>
<td>164</td>
<td>27%</td>
</tr>
<tr>
<td>Total</td>
<td>601</td>
<td></td>
</tr>
</tbody>
</table>
Population

Colostomy

- 75 (12%) had colostomy
  • 42 done at SD
  • End sigmoid or not at all
- 1 percutaneous cecostomy, later converted
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Procedures

**Flex sig, hemorrhoid banding**

- 55 (9%) consultation only
- 2 procedures predominated
  - 548 (85%) had flex sig
  - 215 (34%) had banding
  - Total 1185 procedures
- 2 anal fistulotomies (ASIA A)
- 1 anal cancer diagnosed
Flexible Sigmoidoscopy

548 patients
- Age at 1st exam 65 ± 12, duration 19 ± 15
- 781 flex sigs (1.4/pt)
- 60 (8%) poor prep
- Excluding poor-prep repeats, interval between exams 5.7 ± 2.0 yrs
- 2 referred for operation (cancer, polyp)
- ‘Flex sig’ via stoma & anus in 18 (3%)
- Complications: none
Flexible Sigmoidoscopy

Adenoma detection

- 38 colonoscopies recommended (37 done)
- Median 5 days between flex sig & colonoscopy (3-2003)
- Adenoma → colonoscopy f/u
  • :: denominator = # of pts, not exams
- 26/548 showed adenoma or Ca
  • 4.7% adenoma detection rate
Hemorrhoid Ligation

215 patients

- Age @1\textsuperscript{st} banding 52 ± 13, duration 20 ± 15
- 404 procedures (1.9/pt)
- 86 pts had 187 repeat procedures (range 2-11)
  - Interval between ligations 2.9 ± 3.5 yrs
- Ligations / procedure 4.9 ± 2.0 (range 1-20)
- External components ligated in ASIA A
- Complications: 1 readmit for bleeding (on ibuprofen)
Hemorrhoid Ligation

Did it help?
- 9 hemorrhoid operations in study period (20yrs!)
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Non-Futility

Proximity to death

- QOL procedures should be separated from death by years
- 250 pts (39%) died
  - Age @death 69 ± 11 (range 39-95)
- Interval between any procedure & death = 4.4 yrs
- But… <6mos for 17 procedures (1.4%)
  - Audited
    - Unexpected, or
    - Due to conditions identified at or after procedure
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Limitations

- Pts may have received care outside VA
  • Usually don’t
  • Most likely for urgent matters (bleeding)

- Missed procedures at other VAs
  • Likely limited to <1999

- Subjective bowel prep evaluation
  • Not standardized, but single-observer

- Did not count AD as complication
  • Routinely managed
Limitations / Conclusions

Conclusions

- Flex sig may be useful for screening
  - 8% poor prep rate is low
  - 4.7% adenoma detection rate may be too low

- Hemorrhoid ligation is a maintenance procedure
  - Can extend beyond customary limits
  - >>3 bands / procedure
  - OK to band externals
  - Avoids operation
Conclusions

- Colorectal clinic is a functional element of a comprehensive SCI center
- Flex sig & hemorrhoid banding are valuable, rarely futile
20 Years’ Experience in a VA SCI Colorectal Clinic

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