Plenary 7 – Pain Issues

MODERATORS
Fred M. Howard, MD
John L. Marlow, MD
Tamer A. Seckin, MD

Innie Chen, MD
David I. Eisenstein, MD
Melica Nourmoussavi, MD

Adam R. Duke, MD
Eric C. Liberman, DO
Christina A. Saad, MD, MBA
Professional Education Information

Target Audience
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Plenary 7 – Pain Issues

Moderators: Fred M. Howard, John L. Marlow, Tamer A. Seckin

Faculty: Innie Chen, Adam R. Duke, David I. Eisenstein, Eric C. Liberman, Melica Nourmoussavi, Christina A. Saad

Pain is often considered the fifth vital sign and affects each and every patient. This session provides a range of studies and topics that raise awareness and provide novel approaches to both diagnosing and treating pain.

Learning Objectives: At the conclusion of this course, the clinician will be able to: 1) Explain various etiologies of pelvic pain; and 2) Assess different management options for pelvic and postoperative pain.

Course Outline

2:15  Bladder Base Tenderness in Chronic Pelvic Pain: Prevalence and Associations        M. Nourmoussavi

2:25  Inguinal Hernia as a Cause of Chronic Pelvic Pain: A Key Sign to Make the Diagnosis  C.A. Saad

2:35  Complex Robotic Trachelectomy for Chronic Pelvic Pain after Failed Laparotomic Trachelectomy  D.I. Eisenstein

2:41  Analgesic Efficacy of Transversus Abdominis Plane Block Versus Local Injection in Postoperative Pain Management Following Minimally Invasive Gynecological Surgery  E.C. Liberman

2:51  Presacral Neurectomy: A Review of Anatomy and Surgical Technique  A.R. Duke

2:58  Hospital-Associated Costs of Chronic Pelvic Pain in Canada  I. Chen

3:15  Adjourn
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The following members of AAGL have been involved in the educational planning of this workshop and have no conflict of interest to disclose (in alphabetical order by last name).
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Viviane F. Connor*
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Innie Chen*
Adam R. Duke*
David I. Eisenstein
Speakers Bureau: Abbott Laboratories
Fred M. Howard*
Eric C. Liberman*
John L. Marlow*
Melica Nouroussavi*
Christina A. Saad*
Tamer A. Seckin*

Asterisk (*) denotes no financial relationships to disclose.
Bladder Base Tenderness in Chronic Pelvic Pain: Prevalence and Associations

By: Melica Nourmoussavi, M.D, C.M
PGY-4, Obstetrics & Gynecology
University of British Columbia
Vancouver, BC

Disclosure

- I have no financial relationships to disclose.

Learning Objectives

- At the conclusion of this activity, the participant will be able to:
  - Define the significance of Bladder Base Tenderness (BBT) in pelvic pain population
  - Identify its important associated symptoms and signs
  - Formulate hypotheses for its etiology
  - Integrate a multidisciplinary approach

Background

- 15% of women have CPP (dysmenorrhea, daily pelvic pain, and dyspareunia)
- On pelvic exam, cul-de-sac/uterosacral tenderness associated with endometriosis
- Clinical implications of BBT (anterior vaginal wall)?
- Few studies in populations with interstitial cystitis and endometriosis with unexplained infertility
- **Objective of study:** To determine whether BBT is associated with specific symptoms/signs in women with pelvic pain, with particular emphasis on dyspareunia (deep and superficial).

Methodology

- Retrospective chart review
- Demographic factors, patients symptoms and physical exam signs
- Analysis:
  - Prevalence of BBT in CPP patients (compared to non-pain gynecology controls)
  - Associations between BBT (present/absent) and the other variables collected (bivariate analyses and multiple logistic regression)

Methodology: Pelvic Pain Sample

- Potentially eligible cases (n = 193)
  - (consecutive new pelvic pain patients seen from January - December 2012)
- Examined for eligibility and confirmed eligible (n = 193)
- Excluded (n = 4)
  - (unable to perform pelvic exam due to severe vaginismus)
- Included in the study and analysed (n = 189)
### Results: Bivariate Analyses

<table>
<thead>
<tr>
<th>Variable</th>
<th>BBT + (n=65)</th>
<th>BBT – (n=124)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endometriosis</td>
<td>43% (28/65)</td>
<td>41% (51/124)</td>
<td>0.88</td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superficial dyspareunia</td>
<td>68% (32/47)</td>
<td>34% (32/95)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Deep dyspareunia</td>
<td>94% (51/54)</td>
<td>70% (76/109)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Bladder symptoms</td>
<td>73% (46/63)</td>
<td>56% (67/120)</td>
<td>0.026</td>
</tr>
</tbody>
</table>

### Results: Description of Bladder Symptoms

<table>
<thead>
<tr>
<th>Bladder symptoms</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urgency</td>
<td>37% (70/189)</td>
</tr>
<tr>
<td>Frequency</td>
<td>50% (95/189)</td>
</tr>
<tr>
<td>Pain with full bladder</td>
<td>25% (48/189)</td>
</tr>
<tr>
<td>Dysuria</td>
<td>6% (12/189)</td>
</tr>
<tr>
<td>Other</td>
<td>37% (70/189)</td>
</tr>
</tbody>
</table>

### Results: Multiple Logistic Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>n = 134</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (95% CI)</td>
<td>Change in -2 log likelihood</td>
</tr>
<tr>
<td>Deep dyspareunia</td>
<td>6.40 (1.25-32.7)</td>
</tr>
<tr>
<td>Abdominal wall trigger point</td>
<td>3.44 (1.01-11.7)</td>
</tr>
<tr>
<td>Pelvic floor tenderness</td>
<td>8.22 (3.27-20.7)</td>
</tr>
</tbody>
</table>

### Clinical Relevance

- Propose several mechanisms for BBT in this population
  - Intrinsic bladder problem
  - Myofascial etiology
  - Nervous system sensitization

### Intrinsic Bladder Problem

- Underlying bladder condition (painful bladder syndrome/interstitial cystitis) where bladder pain is accompanied by irritative bladder symptoms
- In our study, bladder symptoms were not independently associated with BBT
- Suggests a specific pain sensitivity of the bladder giving rise to BBT, independent from other bladder symptomatology
Myofascial Etiology

• Association of BBT with abdominal wall trigger points and pelvic floor tenderness
• Myofascial connections between visceral organs like the bladder and its surrounding muscular and fascial structures (levator ani, endopelvic fascia, and abdominal wall musculature)
• Positive feedback loop theory between myofascial trigger points and bladder pain

Nervous System Sensitization

• General increase in pain and tenderness in multiple pelvic structures
• Bladder could be cross-sensitized via viscerovisceral convergence with gynecologic structures at the spinal cord

Caring for Patients with Bladder Base Tenderness

• Specific treatment of bladder sensitization
• At our Center, we utilize a multidisciplinary approach:
  - Pelvic physiotherapy
  - Neuromodulator medications such as tricyclics
  - Cognitive behavioral therapy
  - Mindfulness meditation
• Additional research is necessary to evaluate these multidisciplinary treatments for BBT in the treatment of deep dyspareunia and pelvic floor tenderness.

References

• Yong, PJ; Sutton, C; Suen, M; Williams, C. Endovaginal ultrasound-assisted pain mapping in endometriosis and chronic pelvic pain. J Obstet Gynaecol 2013;33:715-719
• Teitchman, JMH; Parkara, CL. Contemporary clinical presentation of interstitial cystitis. Urology 2007;69:41-47
• Bassaaly R; Tidwell N; Bertolino S; Hoyle L; Downes K; Hart S. Myofascial pain and pelvic floor dysfunction in patients with interstitial cystitis. Int Urogynecol J 2013;22:413-418.
Inguinal Hernia as a Cause of Chronic Pelvic Pain: A Key Sign to Make the Diagnosis

Christina Saad, MD, MBA

Disclosures

• I have no financial relationships to disclose

Objectives

• Integrate inguinal hernia into the differential diagnosis of chronic pelvic pain
• Identify which key characteristics warrant a referral to a hernia specialist

Background – Chronic Pelvic Pain (CPP)

• Pain for 6 months duration or longer
• Common: affects 15% of US adult females
• Numerous causes
• Frustrating to both patients and providers
• Significant societal impact

Background – Inguinal Hernias

• More difficult to diagnose in women than men
• May have indirect, direct, femoral, or combination
• Treatment of hernias is surgical
  • Open
  • Laparoscopic
  • Transabdominal approach
  • Extraperitoneal approach

Study Objective

• To identify key presenting characteristics for inguinal hernia in women as a main cause of chronic pelvic pain
Study Design

- **Design:** Retrospective cohort study
- **Setting:** Academic medical center
- **Patients:** Adult women with chronic pelvic pain and suspicion for inguinal hernia who presented to their gynecologist between March 2009 to February 2014
- **Statistics:**
  - Student’s t-test used for continuous variables
  - Logistic regression modeling used to identify variables contributing to diagnosis of hernia

Intervention

- Referred by the gynecologist to a surgeon specializing in hernia surgery
- Standardized preoperative & postoperative questionnaires administered
- Physical examination targeting inguinal hernia
- Women with a high heightened suspicion for groin hernia underwent surgical exploration and repair, along with concomitant gynecologic procedures if indicated

Results

- 38 women referred by GYN to Gen Surg
- 16 (88.9%) found to have a hernia
- 19 (50%) high clinical suspicion for hernia
- 19 (50%) low suspicion for hernia
- 2 no hernia
- 18 underwent surgical exploration
- 16 (88.9%) found to have a hernia
- Mean pain score decreased from 7.2 preoperatively to 3.1 2 weeks postoperatively (p<0.001)
- No pain symptom characteristics were found to be associated with hernia
- Of various physical exam findings, only point tenderness at the internal inguinal ring was significant among those with a proven hernia:
  - OR=13.25 on logistic regression modeling
  - Overall predictive probability of hernia = 74.2%
  - Sensitivity = 60%
  - Specificity = 87.5%

Inguinal Hernia in a Female Patient
Results

• BMI, age, and pain severity were not associated with hernia
• History of pregnancy, constipation, complaints of bulge, dyspareunia, dysmenorrhea, and radiating pain were not significant with assisting in the diagnosis of inguinal hernias
• Imaging was not predictive of hernia

Conclusion

• Inguinal hernias represent a known cause of chronic pelvic pain in women
• Tenderness at the internal inguinal ring is strongly associated with diagnosis of occult inguinal hernia
• Collaborating with general surgeons and identifying occult hernias as a treatable cause of pelvic pain can improve outcomes

References

• Abercrombie PO, Learman LA. Providing Holistic Care for Women with Chronic Pelvic Pain. JOGNN. 2012;20:1-12.
• Perry CP, Echeverri JD. Hernias as a Cause of Chronic Pelvic Pain in Women. JBS, 2006. 10:212-215.
Complex Robotic Trachelectomy for Chronic Pelvic Pain after Failed Laparotomic Trachelectomy

David I. Eisenstein, M.D.
Henry Ford Medical Group, West Bloomfield, Michigan

Study Objective: To demonstrate laparoscopic facilitation in demarcating and dissecting partial uterus and cervix in pelvic viscera gravely distorted after multiple laparotomic procedures.

Design: Step-wise review of dissection techniques in the face of absent tissue planes, with focus on anatomic spaces and specimen identification and isolation.

Setting: The prevalence of a subtotal or supracervical approach to hysterectomy rose as laparoscopic instrumentation and electrosurgical devices facilitated it as a seemingly easier laparoscopic procedure compared to total hysterectomy, although many claimed benefits to retention of the cervix, such as better sexual and urinary function, were not supported by studies over time. Problematic sequelae to cervical retention also appear in the literature; 6-20% persistent bleeding rate; recurrence of endometriosis; and persistent pain with a history of chronic pelvic pain. Interval trachelectomy can be vaginal or abdominal/laparoscopic; however suspicion for persistent pathology, or, as in our case, prior failure of laparotomy to correctly identify the retained anatomy, may require intraperitoneal visualization and dissection, ensuring resection of target tissue and protection of GI and GU anatomy.

Intervention: Robotic-assisted laparoscopic trachelectomy with adhesiolysis, ureteral dissection, and specimen excision from intense adherence to bladder and fascial scar.

Conclusion: While routine interval trachelectomy may be achieved vaginally or intraperitoneally, cases of persistent pathology associated with distorted anatomy may be best approached by the latter route, where laparoscopy offers excellent access to difficult anatomy.
Science at the heart of medicine

Analgesic Efficacy of TAP Block versus Local Injection in Postoperative Pain Management Following Minimally Invasive Gynecological Surgery

Eric C. Liberman, DO
Assistant Professor
Albert Einstein College of Medicine/Montefiore Medical Center
Bronx, New York

Disclosure

I have no financial relationships to disclose.

Objectives

• At the conclusion of this activity, the participant will be able to list and compare the advantages and disadvantages of using a TAP block for postoperative pain management in minimally invasive gynecological procedures.

Minimally Invasive Surgery

PAIN

Length of Hospitalization

Return to Activities of Daily Living

Post-Operative Narcotic Usage

Preemptive Analgesia

• The administration of analgesics prior to onset of noxious stimuli
• Modifies peripheral and CNS processing of noxious stimuli, thereby reducing hyperalgesia and alldynia


TAP Block

Nerve and subcutaneous tissue

Internal oblique m.

External oblique m.

Transversus abdominis m.
But does it work in Minimally Invasive Gynecological Surgery?

- Few studies have investigated the benefits
- In early 2011, while planning and implementing this study no published data on the use of TAP block in gynecological minimally invasive surgery

### Study Design

<table>
<thead>
<tr>
<th>Group One</th>
<th>Group Two</th>
<th>Group Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP Block</td>
<td>Ropivacaine</td>
<td>Normal Saline</td>
</tr>
<tr>
<td>Local Injection</td>
<td>Normal Saline</td>
<td>Ropivacaine</td>
</tr>
<tr>
<td>Ropivacaine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SDS

- Included & Randomized: n = 220
- Excluded: n = 37 (24 converted)

### Operating Room:

- Treatment given by surgeon and pain management team
- Blinded data collection (n = 183)

### Study Design

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</tr>
<tr>
<td>Local Injection</td>
<td>Normal Saline</td>
<td>Ropivacaine</td>
</tr>
</tbody>
</table>

### Subject Characteristics

<table>
<thead>
<tr>
<th></th>
<th>TAP mean ± SD, n = 61</th>
<th>Local mean ± SD, n = 63</th>
<th>Both mean ± SD, n = 59</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (y)</td>
<td>53.8 ± 11.3</td>
<td>52.0 ± 9.9</td>
<td>56.1 ± 11.0</td>
<td>0.11</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>80.8 ± 20.5</td>
<td>85.9 ± 18.4</td>
<td>79.2 ± 20.0</td>
<td>0.29</td>
</tr>
<tr>
<td>Height (inches)</td>
<td>64 ± 2.6</td>
<td>64.7 ± 2.5</td>
<td>64.1 ± 2.5</td>
<td>0.31</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>30.5 ± 7.4</td>
<td>31.9 ± 7.0</td>
<td>29.9 ± 7.5</td>
<td>0.29</td>
</tr>
<tr>
<td>Duration of Surgery (min)</td>
<td>123.5 ± 46.4</td>
<td>120.3 ± 40.0</td>
<td>128.2 ± 39.5</td>
<td>0.58</td>
</tr>
</tbody>
</table>

### Postoperative Outcomes

<table>
<thead>
<tr>
<th></th>
<th>TAP median, IQ range</th>
<th>Local median, IQ range</th>
<th>Both median, IQ range</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Score at One Hour</td>
<td>3 [2-7] (n=57)</td>
<td>6 [3-7] (n=58)</td>
<td>4 [2-7] (n=53)</td>
<td>0.07</td>
</tr>
<tr>
<td>Pain Score at Six Hours</td>
<td>3 [2-6] (n=57)</td>
<td>3 [2-6] (n=58)</td>
<td>3 [1-6] (n=53)</td>
<td>0.79</td>
</tr>
<tr>
<td>Pain Score at Twenty Hours</td>
<td>3 [1.5-6] (n=57)</td>
<td>3 [2-6] (n=58)</td>
<td>3 [1-5] (n=53)</td>
<td>0.87</td>
</tr>
</tbody>
</table>

### Pain at One Hour

<table>
<thead>
<tr>
<th></th>
<th>TAP median, IQ range</th>
<th>Local median, IQ range</th>
<th>Both median, IQ range</th>
<th>P value</th>
</tr>
</thead>
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<td>6 [3-7] (n=58)</td>
<td>4 [2.7] (n=53)</td>
<td>0.07</td>
</tr>
</tbody>
</table>

### Comparisons P value

<table>
<thead>
<tr>
<th></th>
<th>Local vs TAP</th>
<th>Both vs TAP</th>
<th>Both vs Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Score at One Hour</td>
<td>0.03</td>
<td>0.36</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Kruskal Wallis Test
Pairwise with Dunn adjustment
**Postoperative Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>TAP</th>
<th>Local</th>
<th>Both</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percocet (mg) ± SD</td>
<td>8.77 ± 8.97</td>
<td>10.32 ± 9.65</td>
<td>5.93 ± 8.07</td>
<td>0.03</td>
</tr>
<tr>
<td>IV Dilaudid (mg) ± SD</td>
<td>2.32 ± 1.58</td>
<td>2.63 ± 1.61</td>
<td>2.64 ± 1.78</td>
<td>0.48</td>
</tr>
<tr>
<td>Morphine Equiv. ± SD</td>
<td>20.09 ± 11.6</td>
<td>23.14 ± 12.3</td>
<td>20.68 ± 12.8</td>
<td>0.35</td>
</tr>
<tr>
<td>Time to 1st Request (min) [IQ range]</td>
<td>46 [18-104]</td>
<td>31 [20-56]</td>
<td>28 [13-78]</td>
<td>0.17</td>
</tr>
</tbody>
</table>

**Statistically Significant Percocet Differences**

<table>
<thead>
<tr>
<th></th>
<th>TAP</th>
<th>Local</th>
<th>Both</th>
<th>P value</th>
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<td>10.32 ± 9.65</td>
<td>5.93 ± 8.07</td>
<td>0.03</td>
</tr>
</tbody>
</table>

- Local vs TAP: 0.71
- Both vs TAP: 0.23
- Both vs Local: 0.02

ANOVA & pairwise with Sidak correction

**Significant Findings**

Difference amongst pain scores at one hour:
- Subjects receiving only treatment TAP block injection had significantly less pain than those receiving only treatment local injection

Difference in Percocet usage:
- Subjects receiving both treatment local and treatment TAP block used significantly less Percocet than those receiving only treatment local

**References**

2. Epocrates.
12. Epocrates.
Presacral Neurectomy: A Review of Anatomy and Surgical Technique

Adam Duke, M.D.
University of Tennessee College of Medicine, Chattanooga, Tennessee

Study Objective: To review the proper surgical technique and pertinent anatomy of the laparoscopic presacral neurectomy.

Design: step-by-step explanation of the surgical technique and highlights of the surgical anatomy using video.

Setting: Presacral neurectomy is an excellent intervention for the relief of midline pelvic pain and dysmenorrhea. The surgery can be safely and effectively performed laparoscopically, with cure rates approaching 85% and relatively low complication rates. However, an intimate understanding of the anatomical relationships within the interiliac trigone is critical to a successful outcome.

Intervention: Laparoscopic presacral neurectomy in patient with debilitating midline pelvic pain.

Conclusion: With a full understanding of the anatomy and a step-by-step approach, the laparoscopic approach to presacral neurectomy can be both safe and effective.
Disclosures

- I have no financial relationships to disclose.

CME presentation objective

- Through this lecture, the attendee will gain an appreciation for the economic toll of chronic pelvic pain to hospital systems.

Background

- World Health Organization: "a neglected reproductive health morbidity"
- The burden of this disease:
  - decreased quality of life
  - loss of productivity
  - increased healthcare utilization

Research Objective

- To determine the hospital-related costs associated with women requiring surgery or inpatient admission for chronic pelvic pain in Canada.

Mathias et al., 1996

773 women

Direct costs

2.8 billion USD/year

1994 economic burden of the disease to Canadian society.
Methods

- Population-based, cross-sectional study
- Canadian Institute for Health Information Discharge Abstract Database.
- Inclusion:
  - women ages 15-59.
  - most responsible International Classification of Diseases diagnosis of pelvic or perineal pain, dysmenorrhea, or dyspareunia.
  - surgery or inpatient admission between April 1, 2008 and March 31, 2013
- Clinical diagnoses, interventions, and resource intensity weighting (RIW) were extracted.
- Cost per weighted case (CPWC) was used to determine costs.

Results

5 year total
42,273 cases
$123 million

Pelvic and perineal pain
26,085 cases
$67 million

Dysmenorrhea
13,412 cases
$51 million

Dyspareunia
2,776 cases
$6 million

Type of pelvic pain by age category

Type of procedure by age category

Temporal trends in hospital costs

Type of hospital procedure
Discussion

- Strengths:
  - Population-based and national scope
  - Validated empirical methodology
- Limitations:
  - Province of Quebec is not included in this study
  - Do not account for non-hospital related costs, such as outpatient treatment, loss of productivity, and impact on quality of life.
- Case and cost estimates are likely underestimates of the true hospital-related costs in Canada.

Summary

- Economic toll of chronic pelvic pain is approximately $25 million per year to hospital systems in Canada.
- Hospital use for chronic pelvic pain is clustered in the reproductive and premenopausal age categories.
- Temporal trends indicate that costs are stable over time.
- Hysterectomy is the most common hospitalization:
  - 47% of the cases
  - 68% of costs
- Cases and costs are likely underestimates.

Conclusion

- This study on hospital-related costs demonstrates that chronic pelvic pain represents a considerable economic burden to Canadian society.
- This highlights the need for effective outpatient alternatives to the treatment of this disease, such as the creation of multidisciplinary chronic pelvic pain centres in the country.

Thank you.

Catherine Allaire, MD, FRCSC • George S. MacRae, RN, MN • Corrine Nishi, BA, HRA

References

CULTURAL AND LINGUISTIC COMPETENCY

Governor Arnold Schwarzenegger signed into law AB 1195 (eff. 7/1/06) requiring local CME providers, such as the AAGL, to assist in enhancing the cultural and linguistic competency of California’s physicians (researchers and doctors without patient contact are exempt). This mandate follows the federal Civil Rights Act of 1964, Executive Order 13166 (2000) and the Dymally-Alatorre Bilingual Services Act (1973), all of which recognize, as confirmed by the US Census Bureau, that substantial numbers of patients possess limited English proficiency (LEP).

California Business & Professions Code §2190.1(c)(3) requires a review and explanation of the laws identified above so as to fulfill AAGL’s obligations pursuant to California law. Additional guidance is provided by the Institute for Medical Quality at http://www.imq.org.

Title VI of the Civil Rights Act of 1964 prohibits recipients of federal financial assistance from discriminating against or otherwise excluding individuals on the basis of race, color, or national origin in any of their activities. In 1974, the US Supreme Court recognized LEP individuals as potential victims of national origin discrimination. In all situations, federal agencies are required to assess the number or proportion of LEP individuals in the eligible service population, the frequency with which they come into contact with the program, the importance of the services, and the resources available to the recipient, including the mix of oral and written language services. Additional details may be found in the Department of Justice Policy Guidance Document: Enforcement of Title VI of the Civil Rights Act of 1964 http://www.usdoj.gov/crt/cor/pubs.htm.

Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency”, signed by the President on August 11, 2000 http://www.usdoj.gov/crt/cor/13166.htm was the genesis of the Guidance Document mentioned above. The Executive Order requires all federal agencies, including those which provide federal financial assistance, to examine the services they provide, identify any need for services to LEP individuals, and develop and implement a system to provide those services so LEP persons can have meaningful access.

Dymally-Alatorre Bilingual Services Act (California Government Code §7290 et seq.) requires every California state agency which either provides information to, or has contact with, the public to provide bilingual interpreters as well as translated materials explaining those services whenever the local agency serves LEP members of a group whose numbers exceed 5% of the general population.

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If you add staff to assist with LEP patients, confirm their translation skills, not just their language skills. A 2007 Northern California study from Sutter Health confirmed that being bilingual does not guarantee competence as a medical interpreter. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2078538.