SYLLABUS

608-ANAT:
Navigating the Pelvis: The Surgical Anatomy That Will Keep You Out of Trouble
Professional Education Information

Target Audience
This educational activity is developed to meet the needs of surgical gynecologists in practice and in training, as well as other healthcare professionals in the field of gynecology.

Accreditation
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608-ANAT: Navigating the Pelvis: The Surgical Anatomy That Will Keep You Out of Trouble

Co-Chairs: Benoit Rabischong and Cara Robinson King

Faculty: Shan M. Biscette, Luis Flavio Fernandes, Linda C. Yang

Extensive knowledge of pelvic anatomy must be considered a fundamental pillar of advanced laparoscopy for all subspecialities and pathologies. This course will revisit the retroperitoneal anatomy of the pelvis from the approach of various pelvic spaces. Surgical dissection will include identification of the most sensitive structures, including pelvic nerves, ureters, bladder, and vasculature, with the anatomical advantage offered by laparoscopy. Beyond normal anatomy, the specifics of common operating conditions, such as obesity, deep endometriosis, and fibroids, will be addressed. We are delighted to share a wide range of surgical videos displaying complex laparoscopic pelvic anatomy.

Learning Objectives: At the conclusion of this course, the participants will be able to: 1) Describe how to approach the different pelvic spaces by laparoscopy; 2) demonstrate how to identify and preserve the different vascular, ureteral and nerve structures of the pelvis; 3) discuss how the surgeon must adapt to different anatomical conditions, such as deep endometriosis, obesity, or fibroids, to minimize complications.

COURSE OUTLINE
9:45 am  Welcome, Introduction and Course Overview  B. Rabischong/C.R. King
9:50 am  Pelvic Avascular Spaces Highway to a Safe Surgery  L.F. Fernandes
10:15 am  Pelvic Neuroanatomy: Basic Knowledge to Avoid Surgical Trouble  B. Rabischong
10:40 am  Size Matters: Navigating Surgery in the Obese Patient  S.M. Biscette
11:05 am  Overcoming Anatomic Distortion of the Obliterated Anterior Cul-de-sac  L. Yang
11:30 am  Laparoscopic Hysterectomy: Surgical Techniques to Make Large Fibroids Look Easy  C.R. King
11:55 am  Questions & Answers
12:15 pm  Adjourn
PLANNER DISCLOSURE
The following members of AAGL have been involved in the educational planning of this workshop (listed in alphabetical order by last name).
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The following have agreed to provide verbal disclosure of their relationships prior to their presentations. They have also agreed to support their presentations and clinical recommendations with the “best available evidence” from medical literature (in alphabetical order by last name).
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Linda C. Yang, MD*

Content Reviewers have nothing to disclose.

Asterisk (*) denotes no financial relationships to disclose.

All relevant financial relationships noted have been mitigated.
Pelvic avascular spaces
Highway to a safe surgery

Luiz Flávio Cordeiro Fernandes, MD
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lfc_fernandes@me.com

Disclosure

"I have no financial relationships to disclose"

Objectives

- Recognize the importance of pelvic avascular spaces
- Identify landmarks and boundaries
- Be able to develop each one of them

“If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself, but do not know your enemy, to each victory you will have a loss. If you do not know neither your enemy nor yourself, you will loose all the battles.”

Sun Tzu
Pelvic Spaces

Extraperitoneal areas, avascular and aneural cleavage planes, delimited by, at least, two independent sheets, interposed to completely independent structures, organs and viscera.

“A surgical plane is a potential space between contiguous organs which can be reproducibly created by dissection.”

Heald, RJ
Paravesical space boundaries

Ventrally: Superior pubic ramus, arcuate line
Dorsally: Cardinal ligament (lateral parametrium); uterine vessels
Laterally: Obturator internus fascia/muscle; external iliac vessels
Medially: Caudal portion of vesico-uterine ligament; bladder

Retzius space boundaries

Ventrally: Pubic symphysis
Dorsally: Bladder; parietal peritoneum
Laterally: Arcus tendineus fasciae pelvis; paravesical spaces
Caudally: Anterior aspects of the urethra; pubocervical fascia; bladder neck
### Vesicovaginal Space Boundaries

<table>
<thead>
<tr>
<th>Ventrally</th>
<th>Bladder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dorsally</td>
<td>Pubocervical fascia; cervix (upper part); vagina (inferior part)</td>
</tr>
<tr>
<td>Laterally</td>
<td>Cranial portion of vesicouterine ligament</td>
</tr>
<tr>
<td>Cranially</td>
<td>Peritoneal reflection between the bladder and low uterine segment</td>
</tr>
</tbody>
</table>

### Rectovaginal Space Boundaries

<table>
<thead>
<tr>
<th>Ventrally</th>
<th>Posterior vaginal wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dorsally</td>
<td>Anterior rectal wall</td>
</tr>
<tr>
<td>Laterally</td>
<td>Uterosacral (cranial) and rectovaginal (caudal) ligaments</td>
</tr>
<tr>
<td>Caudally</td>
<td>Levator ani muscle</td>
</tr>
<tr>
<td>Cranially</td>
<td>Peritoneal reflection of the pouch of Douglas</td>
</tr>
</tbody>
</table>

### Retrorectal Space Boundaries

<table>
<thead>
<tr>
<th>Ventrally</th>
<th>Mesorectal fascia/rectum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dorsally</td>
<td>Anterior aspect of the sacrum; sacral promontory</td>
</tr>
<tr>
<td>Laterally</td>
<td>Right iliac artery and ureter; left iliac vein and ureter; hypogastric fascia</td>
</tr>
<tr>
<td>Caudally</td>
<td>Pelvic floor</td>
</tr>
</tbody>
</table>
Conclusions

- Pelvic avascular spaces allow us to navigate into pelvis anatomy in a bloodless and harmless condition
- Vascular, urinary and nervous structures are recognized and preserved when spared by the basic disease
- Central and lateral spaces represent free highways to overcome pelvic traffic jam
References

- Bhuyanpuri H. Radical abdominal hysterectomy for cancer of the cervix uteri: modification of the Takayama operation. Surg Gynecol Obstet (1921) 33:335-341

Pelvic avascular spaces
Highway to a safe surgery

Luiz Flavio Cordeiro Fernandes, MD
Associated Director FMIGS – AAGL (Hospital Beneficência Portuguesa – São Paulo / Brazil)
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Different Levels of Nerve Injury:
Clinical Applications

The authors declare that they have:
No conflict of interest
No financial relationships to disclose

Pelvic Neuroanatomy: Basic Knowledge to Avoid Surgical Trouble

Pelvic Neuroanatomy and Topographic Anatomy

Where do we come from?
From anatomical advantage of laparoscopy...
... to pelvic nerves dissection and a new neuroanatomy

Pelvic Splanchnic Nerves, R

Pelvic Splanchnic Nerves, Paravesical Fossa

pelvic Splanchnic Nerves, Iliolumbar fossa

pelvic Splanchnic Nerves, pararectal fossa

pelvic Splanchnic Nerves, Yabuki space

Pelvic Splanchnic Nerves, right side

Obturator Nerve, « the Star »
Paravesical Fossa, right side

Somatic Nerves
Genito-Femoral Nerve, Femoral Nerve, Obturator Nerve, Testicular and Pudendal Nerve

Autonomic Nerves
Superior Hypogastric Plexus, Hypogastric Nerve, Pelvic Splanchnic Nerve, Inferior Hypogastric Plexus, Visceral branches...

Paravesical Fossa
Iliolumbar Fossa
Pararectal Fossa
Yabuki Space

Femoral and Genito-Femoral Nerves
right side

Obturator Nerve, « the Star »
Paravesical Fossa, right side
Obturator, Lumbar-Sacral, Sciatic and Pudendal Nerves
Ilio-Lumbar Fossa, left side

Obturator, Lumbar-Sacral, Sciatic and Pudendal Nerves
Ilio-Lumbar Fossa, right side

Pelvic Autonomic Innervation
Pararectal fossa, Visceral ligaments

- Sympathetic system
  - Superior hypogastric plexus
  - Hypogastric nerves
- Parasympathetic system
  - Pelvic splanchnic nerves
- Inferior Hypogastric Plexus
- Visceral nerve branches

Hypogastric Nerve
Promontory, Sacrocolpopexy, right side

Hypogastric Nerve
Okabayashi space, Deep Endo

Anatomical variations

- Sacrospinous Ligament
- Superior Rectal Nerve
- Inferior Rectal Nerve

Hypogastric Nerve
Okabayashi Space, Radical Hysterectomy, left side

Pay attention to the peritoneum!!
Hypogastric Nerve, the new « star »

Rectum
Promontory
Right Ureter

Learn to read the screen...

Pelvic Splanchnic Nerves
by Right Latzko Space

Use your instrumentation...

Pelvic Splanchnic Nerves ...
Left Latzko Space
Pelvic Splanchnic Nerves ... UA, DUV, Vaginal arteries

Left Latzko Space

Inferior Hypogastric Plexus
Latzko space

L R

Rectum Ureter

Middle Rectal Vessels
Inferior Hypogastric Plexus

Bladder Innervation
by Yabuki and Vesicovaginal Spaces

Bladder Innervation
by Yabuki and Vesicovaginal Spaces

L R

Pelvic Autonomic Innervation

What happens if I injure nerves?

- Sympathetic system / Adrenergic
  - Compliance and storage
  - Stimulation of urethral smooth sphincter
  - Inhibition of detrusor muscle
  - Urinary incontinence, Urgency

- Parasympathetic system / Cholinergic
  - Voiding
  - Stimulation of detrusor
  - Inhibition of urethral smooth sphincter, Vaginal lubrication and swelling
  - Bladder atonia, Disorders of bladder sensitivity, Decreasing blood flow to vagina, lubrication

- The chance of the surgeon:
  Consequences seem to be more limited if unilateral injury
  But is it always so simple in the real life? Probably No...

Beyond our Surgical Vision, a microanatomy...

Beyond our Surgical Vision, a microanatomy...

Pelvic Autonomic Innervation

Hypogastric nerve fibers in the hypogastric plexus and their preclinical significance: a microanatomy study using objectively validated

3-21 small sized fascicles
- Between 0.05-0.2 mm in diameter
- With 40-100 nerve fibers (axons)
- More than 50 fascicles
- Less than 0.05 mm in diameter
- With 40-100 nerve fibers

Due to anatomical variation and a possible dominant side
**Beyond our surgical dissection**

**Effects of Mechanical Compression on Peripheral Nerve**

Cessation of intraneural blood flow was noted at a mean compressive force of $0.457 \pm 0.022$ N ($\pm$ SEM).

**Complete Conduction Blockage**

- **GRIPPING FORCES**
  - **NOVICES:** 8 N
  - **EXPERIENCED:** 3 N

**Peripheral nerve dissection in laparoscopy**

Learn from neurosurgery, plastic or orthopedic surgeons...

- Learn to read the pictures and use instrumentation.
- Hypogastric nerve: Avoid excessive and prolonged traction.
- Atraumatic dissection, PSN left side, Right Femoral Nerve.
- Interfascicular Neurolysis, 3mm instrumentation.

**Conclusions**

Beyond a complex and sophisticated pelvic neuroanatomy, where we go with the nerves?

- **To an exciting future for pelvic surgeons**
- **But and only if...**
  
  We accept to improve our knowledge and practice by education, training and teaching.
  
  We develop a suitable instrumentation and new methods of nerves identification.

- **Welcome in the Neuropelveology...**

Thank you for your attention!!
Objectives

- Review the physiologic and anatomic considerations associated with obesity
- Discuss the surgical implications of obesity in gynecologic surgery
- Describe strategies for successful minimally invasive surgery in obese patients

Obesity

**IMPACT ON HEALTH**

- Increased risk of death
- Risk factor for mortality from cancer
- Chronic health issues:
  - Hypertension
  - Cardiovascular disease
  - Diabetes
  - Obstructive sleep apnea
  - Hypercholesterolemia
  - Musculoskeletal problems

Obesity Statistics

Prevalence of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2020

Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.
Obesity is a different physiologic state
- Increased energy/metabolic requirement
  - Increased cardiovascular strain
  - Increased oxygen demand
- Decreased chest wall and lung compliance
- Increased airway resistance
- Delayed gastric emptying
- Increase esophageal dysfunction
- Increased cardiac output
  - Larger stroke volume
  - Decreased vascular resistance
  - Increased cardiac work
- Restrictive pattern:
  - Functional residual capacity
  - Total lung volume
  - Total lung capacity
  - Expiratory reserve volume

Surgical Implications
- O’Hanlan et al, JSLS, 2021. Total Laparoscopic Hysterectomy: Making it Safe and Successful for Obese Patients
  - Across BMI classes
    - Similar duration of surgery and EBL
    - Overweight and obese class III had lower odds of > 1 day stay compared to normal BMI (OR=0.65, P = .015)
    - Obese class II patients had fewer complications compared to normal BMI patients (OR=0.27, P= .013)
- Camanni et al, JMG, 2010. Laparoscopy and Body Mass Index: Feasibility and Outcome in Obese Patients Treated for Gynecological Diseases
  - N = 503
  - No difference in LOS, complication rates, outcomes
  - Longer OR time for lymphadenectomy in obese group (p<.05)

Minimally Invasive Approach versus Laparotomy
- Shorter hospital stay
- Less pain
- Decrease risk of ileus, infection, febrile morbidity

Surgical Considerations
- Anesthesia
  - Ventilation and pneumoperitoneum
- Positioning
  - Transfer to and from OR table
  - Prevention of slippage
  - Prevention of nerve injury
- Entry
  - Port placement
- Landmarks
  - Visualization
  - Vessels
  - Visceral fat
- Bariatric table
- Bariatric stirrups
- Corporeal padding
- Bed extenders
Surgical Considerations: Positioning

Wechter et al.
No significant difference in mean slide according to pad type (foam 3.0 ± SD 2.1 cm; gel 4.5 ± SD 4.0 cm, p = 0.08)

Surgical Considerations: Avoiding Nerve Injury

Surgical Considerations: Abdominal Entry

Hackethal et al. Arch Gynecol Obstet, 2015

Place working ports with patient in Trendelenburg position

Surgical Considerations: Port placement

Surgical Considerations: Exposure

Endoloop retraction
- Mobilize sigmoid colon
- Fan retractor
- Endoloop
- Foley lap lift
- Retraction of bladder with running suture
- 30 degree scope
- Vessel sealing systems

Take Away

- For obese and morbidly obese patients, benefits of a minimally invasive approach outweigh the challenges of surgery.
- Thorough perioperative planning and utilization of techniques and resources for patient positioning, visualization and ventilation may help to reduce the risk of reactive laparotomy.
Acknowledgments

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References


O’Hanlan KA, Emeney PL, Frank MI, Milanfar LC, Sten MS, Uthman KF. Total Laparoscopic Hysterectomy: Making It Safe and Successful for Obese Patients. JSLS. 2021 Apr-Jun;25(2):e2020.00087


https://www.cdc.gov/obesity/data/prevalence-maps.html
Overcoming Anatomic Distortion of the Obliterated Anterior Cul-De-Sac

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Associate Professor
Division of Minimally Invasive Gynecologic Surgery
Northwestern Medicine

Objective
- Identify the anatomic and technical challenges related to anterior cul-de-sac obliteration
- Review strategies and tools for bladder flap dissection
- Describe surgical techniques for hysterectomy complicated by anterior cul-de-sac adhesions

Facing the Challenge
- Anticipate the unexpected
- Prepare for the worst case scenario

Goals:
- Restore anatomy
- Minimize bleeding
- Minimize injury

Risk of Cystotomy
- Women with ≥2 prior cesarean deliveries are at greater risk of incidental cystotomies
  - OR: 8.55 (95% CI: 3.98-18.36)
- Other complications:
  - Greater EBL
  - Longer OR times
  - Higher transfusion rate
  - Increased abdominal wound infection and UTI

Anatomic Challenges
- Limits placement of suprapubic port
- Uterine manipulator may be difficult to place
- Loss of tactile and visual landmarks due to obscuring of colpotomizer cup
- Bladder margins cannot be distinguished
Challenges

Trocar Placement

Alternatives to Uterine Manipulator

Accessory Port Hopping
Techniques to Delineate Bladder Anatomy

- Backfilling bladder
  - Fluid insufflation (NaCl with or without methylene blue)
    - Cystoscope method
    - Suction-irrigator method
  - CO2 insufflation
- Rigid Foley catheter guide

Backfilling Bladder

Rigid Foley Catheter Guide

Use of Rigid Foley Catheter Guide

Cystosufflation
Cystosufflation with CO2 in 173 pts

- No cystotomy or other urologic complications

- Advantages: no added cost or significant time; rapid inflation/deflation of bladder

- Caution: inflate under continuous direct LSC visualization to prevent uncontrolled overinflation

214 patients with previous operative delivery undergoing elective c-section

- Retrograde fill with 300 cc saline versus no retrograde fill

- Bladder injury rate lower: 2.8% vs 20.6% (p<.0001)

- Decreased EBL: 585 cc vs 797 cc (p<.0001)

### Key Clinical Pearls

- Devascularize as best as possible before tackling dense adhesions
  - Upper pedicles (IP or utero-ovarian)
  - Uterine pedicles

- Restore anatomy to uncover anatomic landmarks

- Find correct tissue planes
  - Keep adipose tissue with bladder
  - Err on the side of the uterus

### Approach to Vascular Pedicles

- Secure and divide upper pedicles first

- Divide round ligaments

- Skeletonize uterine artery pedicle

- Ligate and transect uterine artery from a posterior approach

- Alternatively, may ligate the uterine artery at its origin

### Benefits of the Posterior Approach

- Efficient control of uterine vasculature

- Posterior landmarks are preserved – colpotomizer cup, uterosacral ligaments

- Does not require full development of bladder flap
Lateral Approach to Vesicovaginal Space

- Traditional midline approach for creation of bladder flap can predispose to injury
- Common mistake: peritoneum is pushed away from bladder but bladder remains adherent to cervix
- Lateral approach enables surgeon to identify key landmarks (uterine vasculature, colpotomizer cup, cervix)
- Development of a surgical window
- Unlikely that c-section scar extends to lateral aspect

Adhesions likely to occur at and superior to lower uterine segment

Develop the space below the adhesion site – find the window of opportunity!
Restore Anatomy & Find Landmarks

References


Conquering the Large Fibroid Uterus: Critical Anatomy for Efficient Hysterectomy

Cara R. King, DO, MS
Section of Minimally Invasive Gynecologic Surgery
Director, Benign Gynecologic Surgery
Director of Innovation, Women’s Health Institute
Associate Program Director, MIGS Fellowship
Cleveland Clinic

Objectives

• Recognize critical retroperitoneal anatomy to execute uterine artery ligation at its origin
• Understand techniques for ureter identification and ureterolysis to safely navigate cervical or broad ligament fibroids

Disclosure

I have no financial relationships to disclose

Surgical outcome and complications of total laparoscopic hysterectomy for very large myometrial uteri in relation to uterine weight: a prospective study in a continuous series of 461 procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>&lt;300gm</th>
<th>300-500gm</th>
<th>500-800gm</th>
<th>&gt;800gm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total patients, no.</td>
<td>112</td>
<td>117</td>
<td>98</td>
<td>74</td>
</tr>
<tr>
<td>Uterine weight complications (%)</td>
<td>6 (5.5)</td>
<td>7 (6.0)</td>
<td>7 (7.2)</td>
<td>10</td>
</tr>
<tr>
<td>of TLH, ac. (%)</td>
<td>5 (4.5)</td>
<td>6 (5.2)</td>
<td>6 (6.2)</td>
<td>8</td>
</tr>
<tr>
<td>p (ANCOVA)</td>
<td>0.479</td>
<td>0.479</td>
<td>0.479</td>
<td>0.479</td>
</tr>
</tbody>
</table>


• Uterine weight was predictive of length of surgery (>120 minutes) and increased blood loss, but was NOT associated with length of hospital stay, transfusion rate, intraop/postop complications

Drop a Scope!
Set yourself up for a great case
- Ensure correct uterine manipulator placement or consider alternative option
- Consider insertion of ureteral stents
- Perform thoughtful and deliberate port placement

Secure the blood supply
- If you can secure the blood supply, you will win!
- Every hysterectomy has 4 pedicles

Secure the blood supply FIRST!
- Once all four pedicles are secured, then complete the remaining portions of your dissection
- Devascularization of the uterus will assist with:
  - Ureterolysis
  - Myomectomy
  - Mobilization of scarred bladder flap
  - Lysis of bowel adhesions

Lower pedicle ligation
- Retroperitoneal space is the answer!!
  - Secure the uterine artery at its origin from the internal iliac artery
  - Identification of the ureter is pivotal
Identify course of the ureter

Approaches to the uterine artery
- Superior approach
- Medial approach
- Lateral approach

Pelvic Sidewall Dissection Video

Uterine Artery Ligation Video

Modified Radical Hysterectomy Video
Key Takeaways

- Thorough understanding of retroperitoneal anatomy is critical for safe ligation of the uterine artery at its origin.
- Understanding techniques for ureter identification and ureterolysis allows safe navigation of cervical and broad ligament fibroids.

Thank you.

References

Assembly Bill 1195 was signed into law on July 1, 2006 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). It is the intent of the Legislature to encourage physicians and surgeons, continuing medical education providers located in California, and the Accreditation Council for Continuing Medical Education to meet the cultural and linguistic concerns of a diverse patient population through appropriate professional development.

Cultural and Linguistic Competency: Providing readily available, culturally appropriate oral and written language services to limited English proficiency (LEP) members through such means as bilingual/bicultural staff, trained medical interpreters, and qualified translators.

Cultural Competence: A set of congruent behaviors, attitudes, and policies that come together in a system or agency or among professionals that enables effective interactions in a cross-cultural framework.

Cultural Competence requires organizations and their personnel to:
- Value diversity.
- Assess themselves.
- Manage the dynamics of difference.
- Acquire and institutionalize cultural knowledge.
- Adapt to diversity and the cultural contexts of individuals and communities served.

California Business & Professions Code §2190.1(c)(3) states that associations that accredit continuing medical education courses shall develop standards before July 1, 2006, for compliance with the cultural competency requirements. The associations may update these standards, as needed, in conjunction with an advisory group that has expertise in cultural and linguistic competency issues. Cultural competency means a set of integrated attitudes, knowledge, and skills that enables a health care professional or organization to care effectively for patients from diverse cultures, groups, and communities. At a minimum, cultural competency is recommended to include the following: (A) Applying linguistic skills to communicate effectively with the target population. (B) Utilizing cultural information to establish therapeutic relationships. (C) Eliciting and incorporating pertinent cultural data in diagnosis and treatment. (D) Understanding and applying cultural and ethnic data to the process of clinical care, including, as appropriate, information pertinent to the appropriate treatment of, and provision of care to, the lesbian, gay, bisexual, transgender, and intersex communities.

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 (Assembly Bill 305) requires that state agencies that serve a substantial number of non-English-speaking people employ a sufficient amount of bilingual persons in order to provide certain information and render certain services in a language other than English.