AAPC

HEALTHCON

Foundations of Anesthesia Practice and Pain Management

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What is Anesthesia?

- General Anesthesia
  - Unconsciousness
  - Amnesia
  - Analgesia
  - Immobility

Outline - Anesthesiology

- Basics of billing
- Types of anesthesia providers
- Medical direction versus supervision
- Types of anesthesia
- Sedation

Outline – Pain Management

- Facet joints
  - Intra-articular
  - Diagnostic medial branch blocks
  - Radiofrequency ablation
- Epidural
  - Intralaminar
  - Transforaminal
  - Caudal

Billing Basics

- (Base units + Time units) x Anesthesia Conversion Factor
- Base units determined by CPT code
  - Use highest units per CPT if multiple procedures – do not add
- Time units (in 15 minute increments)
  - Government payors split time into 1/15th units
- If non-government payor
  - ASA classification
  - Modifying units

Billing Basics

- Whomever is on the record for the majority of time is the billing provider
- Professional fee split between Physician and Anesthetist
  - Separate line items on bill
  - Students, residents and fellows do not generate line item

Billing Basics

- Physician
  - Personally performed services
  - Medically directed single case
  - Medically directed 2-4 cases
  - Medically supervised more than 4 cases
- CRNA
  - Medically directed by physician
  - Non-medically directed
- AA
  - Medically directed

Anesthesia Modifiers

- AA – Personally performed by Anesthesiologist
- AD – Medical supervision of over 4 cases
- QK – Medical direction up to 4 concurrent anesthesia services
- QX – CRNA service medically directed by Anesthesiologist
- QY – Anesthesiologist medically directs 1 CRNA
- QZ – CRNA services without medical direction

Anesthesia Modifiers

- QS – Monitored anesthesia care (MAC)
- G8 – MAC for deep, complex or complicated procedures
- G9 – MAC for patient with severe cardio-pulmonary disease

Anesthesia Modifiers

- Non-government payors
  - P1 – P6 correlates to ASA physical status
    - P3 = 1 extra unit, P4 = 2 extra units, P5 = 3 extra units

ASA Physical Status

- ASA 1: Healthy patient (Non smoker, no/minimal alcohol use)
- ASA 2: Mild systemic disease (Smoker, pregnant, obesity, well controlled DM/HTN)
- ASA 3: Severe systemic disease (Poorly controlled DM/HTN, BMI > 40, implanted pacemaker, history of MI/CVA/TIA/CAD/Stents/PCA, on dialysis, moderate reduction of EF, alcohol dependence/abuse, premature infant)

ASA Physical Status

- ASA 4: Severe disease, constant threat to life (MI/CVA/TIA/Stents < 3 months, severe cardiac valvular disease, cardiac ischemia, severe reduction in EF, sepsis, DIC, ARD/ESRD not on scheduled dialysis)
- ASA 5: Moribound patient not expected to survive without an operation (Ruptured aortic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel with significant cardiac disease, multiple organ/system dysfunction)
- ASA 6: Brain dead donor

Additional units

- Non-government payors
  - Position other than supine/lithotomy: add up to 2 units, but not to exceed 5 total base units
  - Field avoidance: limited access or more difficult monitoring will add up to 2 units, but not to exceed 5 total base units

Additional Units

- Non-government payors
  - Age under 1, or over 70: 1 additional unit
  - Emergency: 2 additional units
  - Induced hypotension/hypothermia: 5 additional units

Example - Medicare

- Case: 63 year old with coronary artery bypass x 4
- Anesthesia Time: 4 hours and 15 minutes
- Location: Minnesota
- Personally performed

Example - Medicare

- Surgery CPT code: 33513 ASA 00567 MODIFIER AA
- Base units: 18
- Time units: 17
- Conversion factor: 150.00
- (Base units + Time units) x Conversion factor = $5,250.00

Lines or TEE

- Arterial line: 36620
- CVP line: 36555 (under 5 years of age)/36556 (age 5 or older)
- Swan-Ganz: 93503
- Ultrasound for line placement: +76937
- TEE for diagnostic (12) or congenital (15): 93312/93315

Ultrasound Guidance

- Remember it is an add on code.
- Ultrasound guidance of vascular access requiring ultrasound evaluation of potential access sites. Documentation of selected vessel patency, concurrent realtime ultrasound visualization of vascular needle entry, with permanent recording and reporting
- List separately in addition to code for primary procedure.
- (DO NOT REPORT 76937 in conjunction with 37191,37192,37193,37760,37761 or 76942

Example

- Previous CABG x 4 also had arterial line placed, as well as CVP under ultrasound
- Also able to charge:
  - Arterial line: 36620
  - CVP: 36556 (age 5 or older)
  - Ultrasound for line placement: +76937

Types of Anesthesia Providers

Types of Anesthesia Providers

- Anesthesiologist
  - Physician
  - Undergraduate degree
  - 4 years of medical school
  - 4 years of residency
- Possible additional fellowship training

Types of Anesthesia Providers

- Certified Registered Nurse Anesthetist
  - Undergraduate nursing degree
  - 12 months working in an ICU setting
  - 24-42 months graduate education in anesthesia
- Opt out
  - 17 states opted out of federal physician supervision requirement

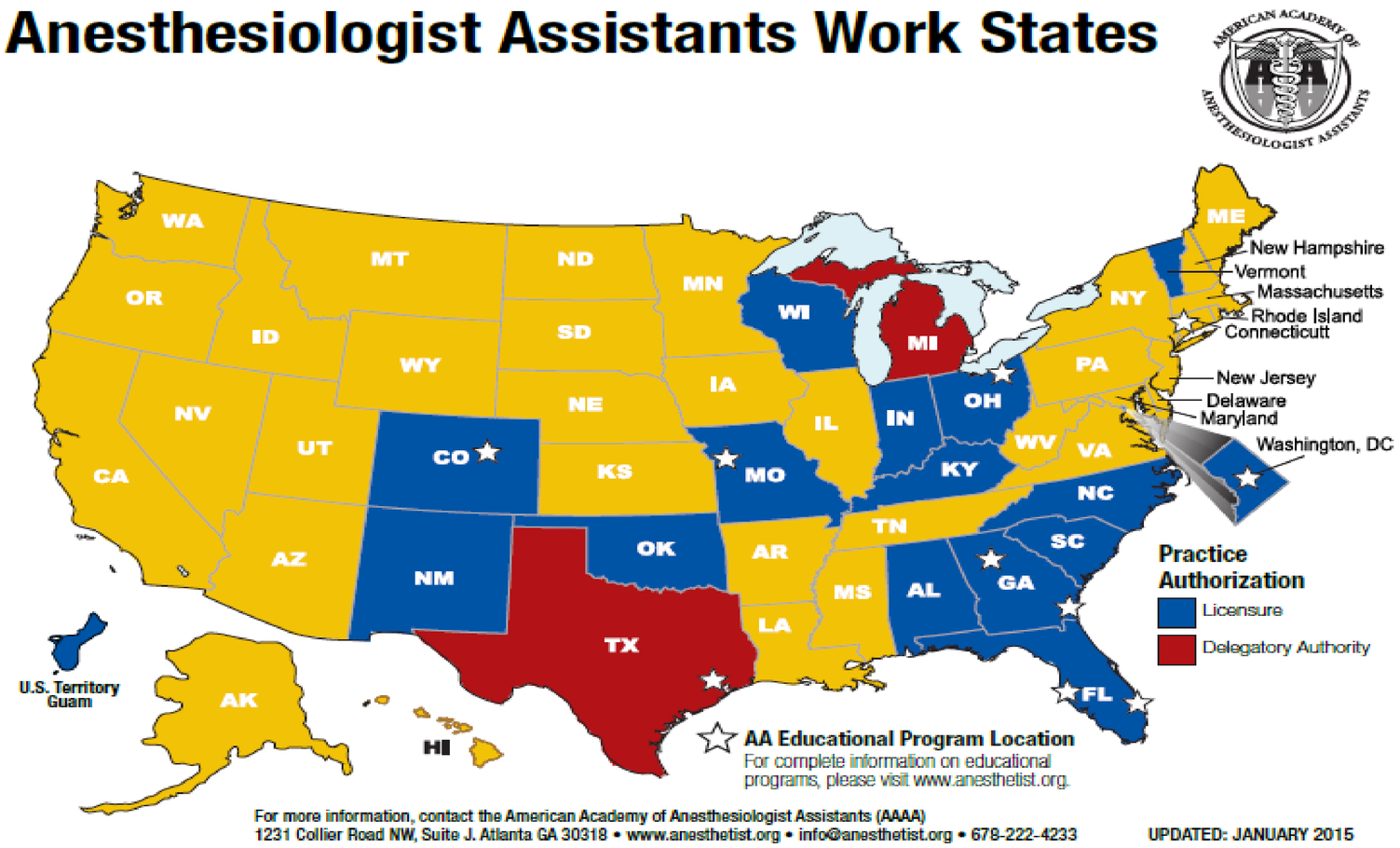
CRNA Opt Out

https://azcrna.wordpress.com/2016/01/15/introduction-2/

Types of Anesthesia Providers

- Anesthesiologist Assistant
  - Bachelor degree (with typical pre-medical coursework)
  - 24-28 months of graduate education in anesthesia
  - Work solely in the anesthesia care team model
  - 17 states have legislation allowing practice

Anesthesiologist Assistants



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Types of Anesthesia Providers

- Trainees
  - Residents
    - Physicians
    - Graduated medical school
    - Completing specialization training
  - Fellows
    - Physicians
    - Graduated medical school and residency
    - Completing sub-specialty training

Types of Anesthesia Providers

- Trainees
  - Student Registered Nurse Anesthetists
  - Student Anesthesiologist Assistants

Different Payment Rates

Personally Performed - AA

- Performed entire service alone
- Involved in one case with resident or student
- Involved with two cases involving residents only
- Involved in resident case concurrent with one medical direction
- Involved in case with anesthetist that is medically necessary (AA & QZ modifiers)

Medical Direction

- Physician directs 2 to 4 qualified individuals
  - Pre-anesthetic exam and evaluation
  - Creates anesthetic plan
  - Personally participates in demanding portions
- Any procedures done by qualified person
- Monitors anesthetic at frequent intervals
- Physically present and available
- Provides indicated post-anesthesia care

Medical Direction

- Can direct up to 4 cases if in room provider:
  - CRNA
  - AA
  - Resident
- Can only direct 2 cases if a student is involved
- Can address short emergency, labor epidural, periodic OB monitoring, receive patients into OR for next surgery, manage PACU, handle scheduling matters in addition to cases

Medical Direction

- Physician
  - 50% of the base units and total time
- Anesthetist
  - 50% of the base units and the time present
- Trainees
  - Do not generate line item for any charges

Medical Supervision

- Applies if the requirements for medical direction are not met
- Government payors only allow three base units per procedure
  - Additional time unit possible if documentation that physician was present at induction

Concurrency

- This is a fluid number
- Depends on how many cases the Anesthesiologist is covering **at any one time**
- Billing is based off of **highest** concurrency at any point during the cases covered
- This means if one Anesthesiologist ever covers more than 4 cases at one time, all of those cases have to be billed as supervision

Concurrency

- Medical direction of one to four procedures at one time

Surgery	Time	Concurrent Procedures
Case 1	7:00-7:20	2
Case 2	7:10-7:45	2
Case 3	7:30-8:15	3
Case 4	8:00-11:00	3
Case 5	8:10-8:55	3
Case 6	8:30-9:15	3

Examples

OR 1 In Room: Amy CRNA, Bill SRNA Supervising: Dr. Who	Dr. Who Rooms: 4 Medically Directed	OR 4 In Room: Dr. McCoy (Res) Supervising: Dr. Who
OR 2 In Room: Tim, CRNA Supervising: Dr. Who	Dr. Hyde Rooms: 2 Personally Performed	OR 5 In Room: Dr. Frank (Res) Supervising: Dr. Hyde
OR 3 In Room: Jill, AA Supervising: Dr. Who		OR 6 In Room: Dr. Stein (Res) Supervising: Dr. Hyde

Examples

OR 1

In Room: Amy CRNA, Bill SRNA
Supervising: Dr. Who

OR 2

In Room: Tim, CRNA
Supervising: Dr. Who

OR 3

In Room: Jill, AA
Supervising: Dr. Who

Dr. Who
Rooms: 4
Medically
Directed

Dr. Hyde
Rooms: 2
Personally
Performed

OR 4

In Room: Dr. McCoy (Res)
Supervising: Dr. Who

OR 5

In Room: Dr. Frank (Res)
Supervising: Dr. Hyde

OR 6

In Room: Dr. Stein (Res)
Supervising: Dr. Hyde

Dr. Who called to do a labor epidural

Examples

OR 1

In Room: Amy CRNA, Bill SRNA
Supervising: Dr. Who

OR 2

In Room: Tim, CRNA
Supervising: Dr. Who

OR 3

In Room: Jill, AA
Supervising: Dr. Who

Dr. Who
Rooms: 4
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In Room: Dr. Stein (Res)
Supervising: Dr. Hyde

Dr. Hyde discharging patients from the PACU

Examples

OR 1

In Room: Amy CRNA, Bill SRNA
Supervising: Dr. Who

OR 2

In Room: Tim, CRNA
Supervising: Dr. Who

OR 3

In Room: Jill, AA
Supervising: Dr. Who

Dr. Who
Rooms: 4
Medically
Directed

Dr. Hyde
Rooms: 2
Medically
Directed

OR 4

In Room: Dr. McCoy (Res)
Supervising: Dr. Who

OR 5

In Room: Deb, CRNA
Supervising: Dr. Hyde

OR 6

In Room: Jon, CRNA
Supervising: Dr. Hyde

CRNA gives lunch breaks in OR 5 and OR 6

Breaks

- Must be careful in regards to in room provider getting breaks
  - Especially true when trainees are involved
  - Anesthesiologist billing AA with 2 resident rooms is in violation if CRNA gives breaks to both residents at same time
  - SRNA are not considered qualified personnel!

Types of Anesthesia

- Local Anesthesia
- Regional Anesthesia
  - Primary anesthetic
  - Post op pain control
- General Anesthesia
- Monitored Anesthesia Care
  - QS
  - G8 – Deep, complex or invasive procedures
  - G9 – History of severe Cardio-Pulm condition

Regional Anesthesia

- Primary anesthetic
  - Included in anesthesia time
  - Time is added to case
  - Factors into concurrency
- Post op pain control
  - Not anesthesia time
  - Separate procedural charge
  - Minutes not billed

Monitored Anesthesia Care

- Possibly indicated due to:
  - Nature of procedure
  - Patients clinical condition
  - Potential to convert to general or regional anesthetic
- Does not need to correlate with any certain depth of sedation

Sedation

	Minimal Sedation Anxiolysis	*Moderate Sedation/ Analgesia ("Conscious Sedation")*	*Deep Sedation/ Analgesia*	*General Anesthesia*
Responsiveness	Normal response to verbal stimulation	Purposeful** response to verbal or tactile stimulation	Purposeful** response following repeated or painful stimulation	Unarousable even with painful stimulus
Airway	Unaffected	No intervention required	Intervention may be required	Intervention often required
Spontaneous Ventilation	Unaffected	Adequate	May be inadequate	Frequently inadequate
Cardiovascular Function	Unaffected	Usually maintained	Usually maintained	May be impaired

AMERICAN SOCIETY OF ANESTHESIOLOGY CONTINUUM OF DEPTH OF SEDATION: DEFINITION OF GENERAL ANESTHESIA AND LEVELS OF SEDATION/ANALGESIA

Sedation

- 2017 has new codes for moderate/conscious sedation when sedation is being performed by the same provider who is doing the procedure
  - Does not apply to the anesthesiologist if they are only providing the anesthesia services
  - Can apply to pain physicians in certain circumstances

CPT Coding Changes: Moderate Sedation 2017

- Starting in 2017, Moderate Sedation CPT Codes 99151, 99152, 99153, 99155, 99156 and 99157 should be used when administering moderate sedation with each procedure. Multiple CPT codes for 2017.

- NOTE: There is a table for the new codes, based on time and age, in the 2017 CPT book.

- Codes 99151- 99157 are not used to report administrationof medications for pain control, minimal sedation, deep sedation, or monitored anesthesia care.

- 99143 – 99150 have been deleted

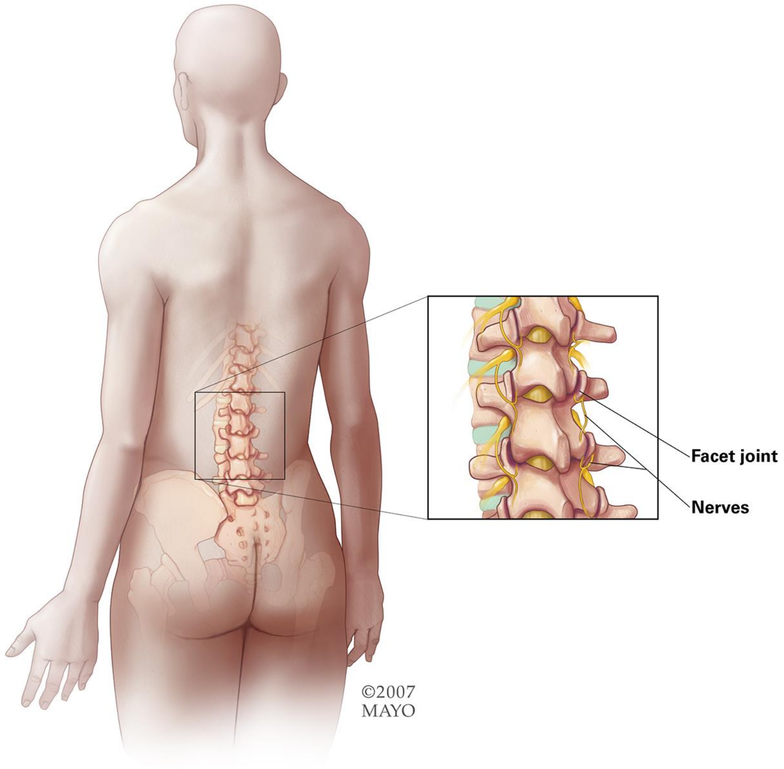
Pain Management

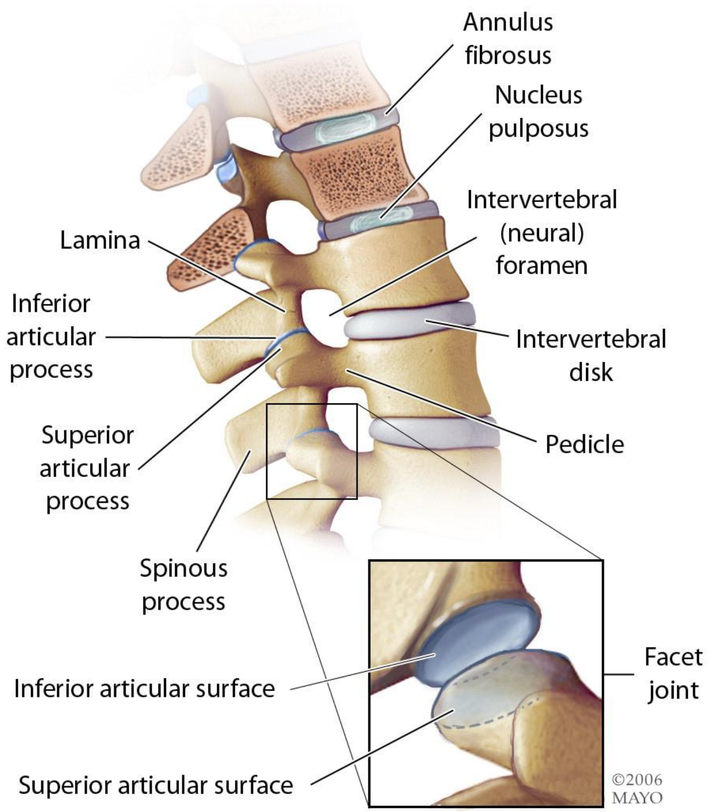
- Facet joints
  - Intra-articular
  - Diagnostic medial branch blocks
  - Radiofrequency ablation
- Epidural
  - Intralaminar
  - Transforaminal
  - Caudal

Facet Joints

- Located on the posterior aspect of spine
- Articular surface between adjacent vertebral bodies
- Also called zygopophyseal joints
- True synovial joint
- Innervated by two spinal levels
  - Branches from dorsal ramus at same level
  - Branches from dorsal ramus one level superiorly

Facet Joints





Diagnosing Facet Arthropathy

- X-ray and MRI imaging
- History
  - Increased load under extension of spine = increased pain
  - Usually doesn’t go past knees
- Physical exam
  - “Facet loading manuevers”
  - Lateral rotation in lower spine
  - Lateral flexion or extension of neck

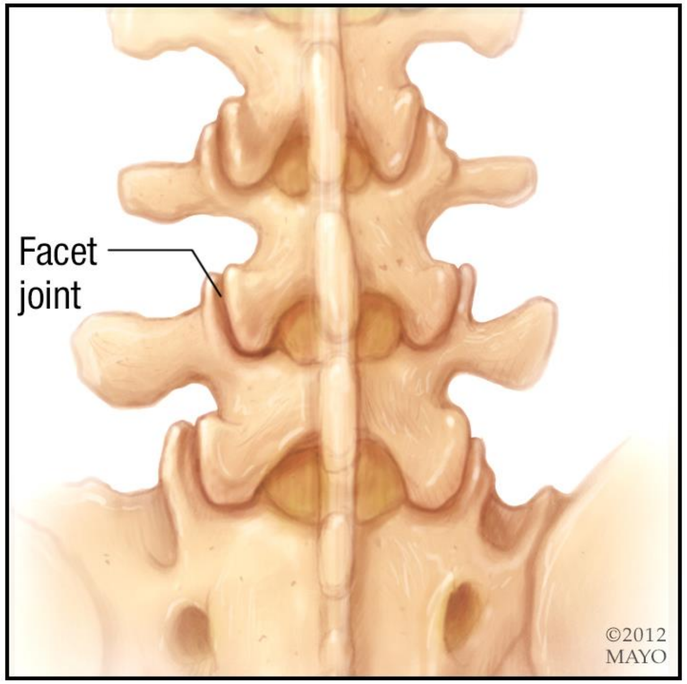
Facet Arthropathy Treatment

- Intra articular injection
- Diagnostic medial branch blocks
- Radiofrequency ablation

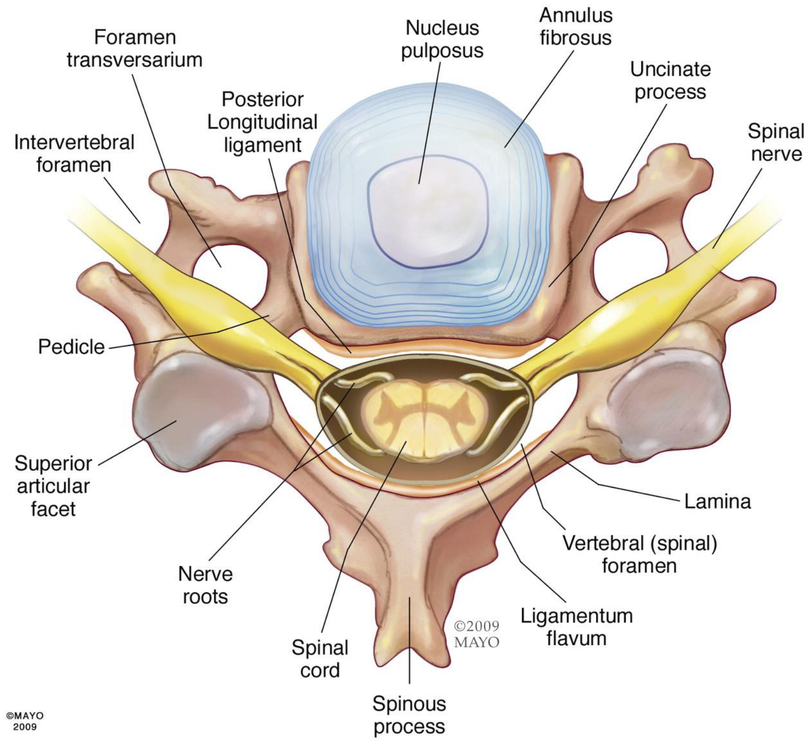
Facet Arthropathy Treatment

- Intra articular injection
  - Joint labeled by superior and inferior vertebral body
    - IE: L4-L5 facet joint is the joint between the L4 and L5 vertebral bodies
  - Small volume (~1.5ml per joint)
  - Allows isolation of specific joint

Facet Arthropathy Treatment



Facet joint complex - back view



Facet Arthropathy Treatment

- Medial branch block
  - Each joint innervated by medial branch of dorsal ramus at level as well as superior level
  - Diagnostic
  - Radiofrequency ablation

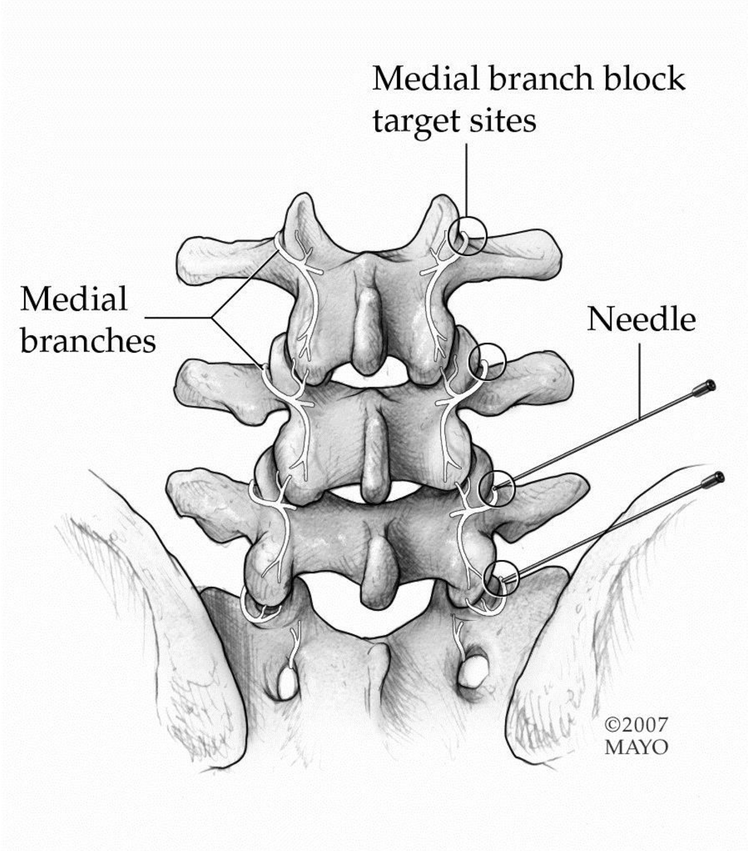
Facet Arthropathy Treatment

- Diagnostic medial branch block
  - Short term relief (depends on local anesthetic utilized)
  - Each joint requires two levels to be blocked
  - Small amount of local anesthetic placed at junction of superior articular process and transverse process
  - Usually two sets of diagnostic blocks required prior to radiofrequency ablation (pain diary)

Facet Arthropathy Treatment

- Radiofrequency ablation of medial branches
  - Requires greater than, or equal to, 80% pain relief with two separate diagnostic medial branch blocks
  - Can repeat if greater than, or equal to, 50% pain relief for 6 months
  - Motor testing to ensure no lesioning of motor nerves

Facet Arthropathy Treatment



Examples

- Intra-articular joint injections of the left L3-L4 and L4-L5 facet joints
  - 64493-LT, 64494-LT (commonly called facet joint injection)
- Intra-articular joint injections of bilateral L4-L5 facet joints
  - 64493-50

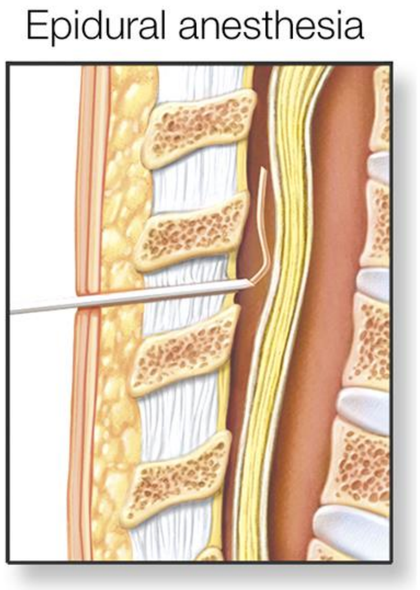
Examples

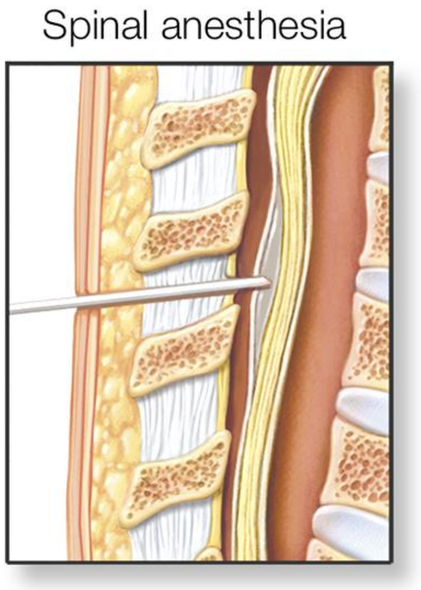
- Radiofrequency ablation of right L3, L4 and L5 vertebral bodies
  - 64635-RT, 64636-RT X2
- Diagnostic medial branch of right L3, L4 and L5 vertebral bodies
  - 64493-RT, 64494-RT, 64495-RT

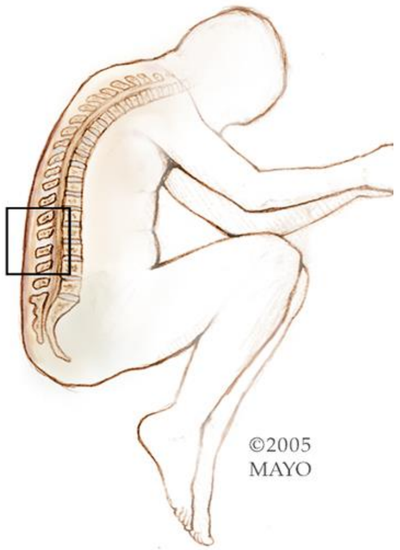
Epidural Injections

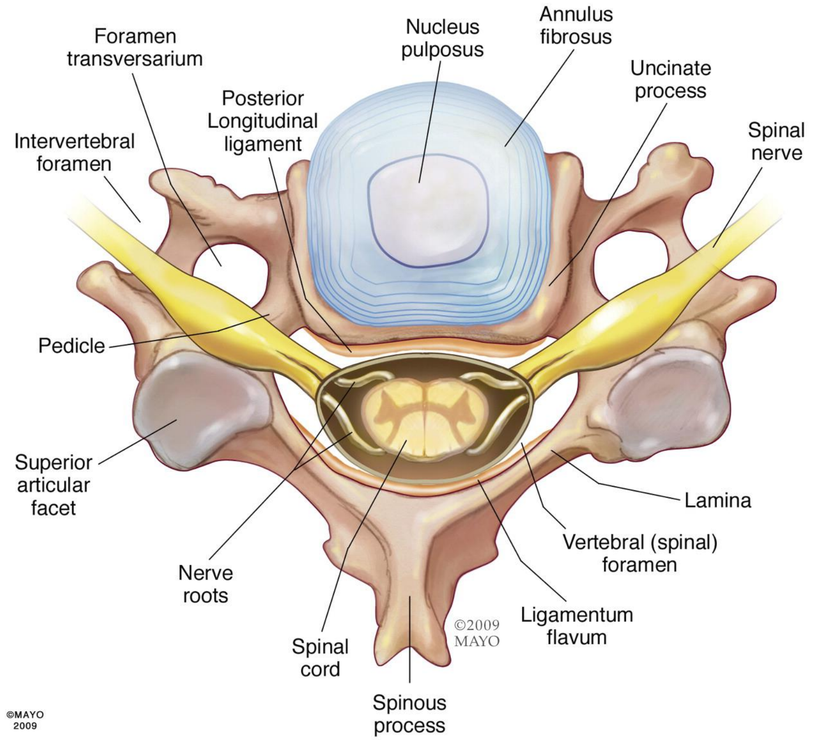
- Epidural space
  - Potential space that is located between the dura and the ligamentum flavum
  - Contains fat and blood vessels

Epidural Injections









Epidural Injections

- Location
  - Cervical
  - Thoracic
  - Lumbar or Sacral
- Technique
  - Intralaminar
  - Transforaminal
  - Caudal

Epidural Injections

- Indications:
  - Unilateral or bilateral radiculopathy
  - Spondylolisthesis
  - Spinal deformity
  - Pain from vertebral compression fractures
  - Herpes Zoster

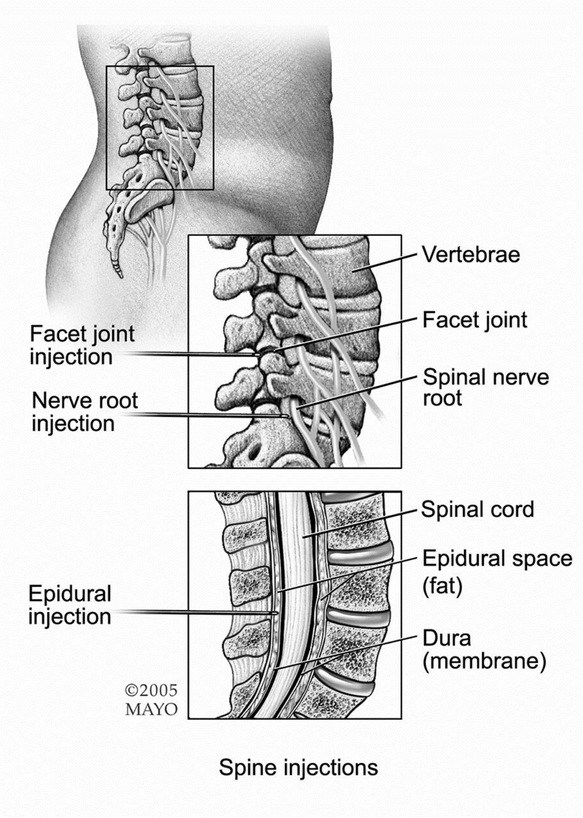
Epidural Injections

- Benefit of transforaminal approach
  - Ability to place medicine closer to the nerve root
  - Use of less medication to achieve similar or superior outcomes than intralaminar approach

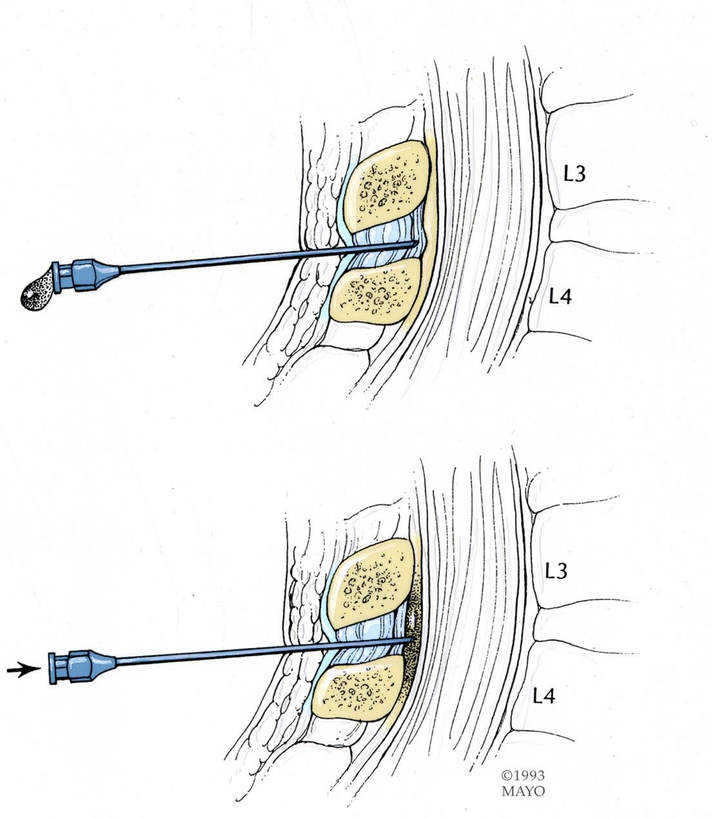
Epidural Injections

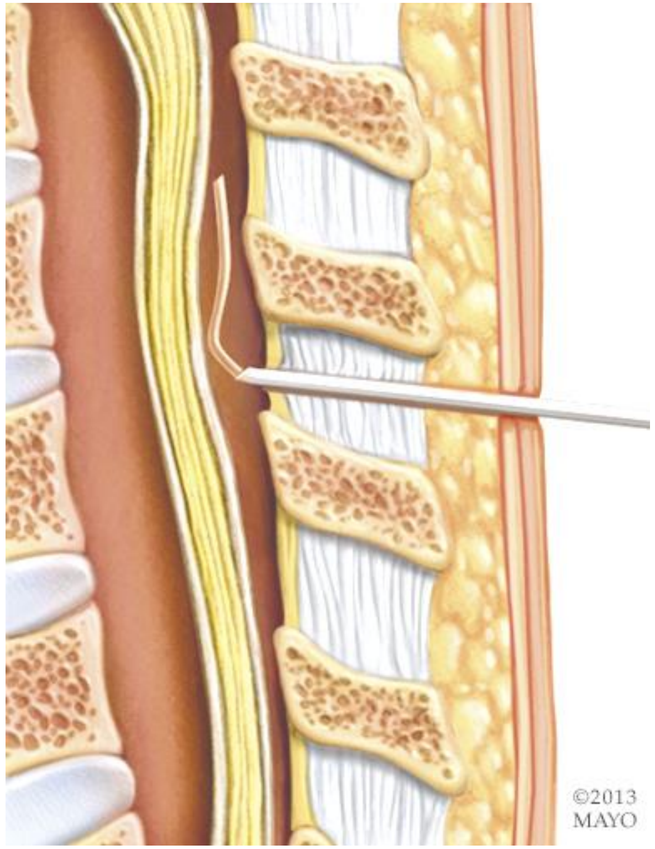
- Caudal
  - Beneficial in adults who have had back surgery
  - Require larger volume of medication to spread cephalad
  - Can utilize a catheter to reach more cephalad levels

Epidural Injections



Spine injections





Examples

- A patient with an acute left > right sided radiculopathy due to L5-S1 disc herniation
  - Intralaminar epidural injection performed at L4-L5
  - 62322 w/o image guidance
  - 62323 with image guidance

Examples

- A patient with significant left foraminal stenosis at L4 resulting in an isolated L4 radiculopathy
  - Transforaminal epidural injection at left L4
  - 64483
  - If using ultrasound guidance code to 0230T
  - Note: Fluoroscopy and any injection of contrast are inclusive components of 64479 – 64484,(imaging guidance and localization are required for performance of these codes)

Examples

- Gentleman who is s/p lumbar laminectomy with chronic radicular pain
  - Caudal epidural injection
  - 62322 without image guidance
  - 62323 with image guidance

Summary

- Anesthesia billing unique due to base units + time units
- Concurrency must be watched closely
- Special attention to types of providers giving breaks is important, especially in academic institutions
- Proper classification of ASA physical status can result in large changes in billing – Don’t forget emergency status!
- Proper documentation important for coding pain procedures

Questions

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