Providing Expert Analgesia to Patients With Substance Use Disorders: Case Studies
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Conflict of Interest Disclosure
• Author’s Conflicts of Interest;
  – P. Rosier, Mallinckrodt Speakers Bureau
Objectives

- Assess the patient experiencing acute pain complicated by substance use disorder
- Describe interventions to provide analgesia to patients experiencing complicated acute pain and SUD
- Evaluate the effectiveness of analgesic interventions in the patient with a SUD

The Problem

- Substance use disorder is a BIG problem
  - Inadequate analgesia can trigger a relapse and create a new addiction
- Persistent Pain
- Acute on Persistent Pain
- Co-morbidities
  - Behavioral Health Issue

Population of Patients

- In recovery
  - Methadone
  - Buprenorphine
  - Vivitrol
  - Probuphine
- Active substance abusers
- Unauthorized use of prescribed medications
  - Opioids
  - Substitution therapy
- Planned or unplanned admission
- Acute on persistent pain
- Co-existing behavioral health issues
Ethics in Pain Management

Ethical principals from The International Council of Nurses Code of Ethics for Nurses. Ask yourself these questions:

- Autonomy- Are the patient's preferences in pain treatment given the highest priority?
- Beneficence- Does the patient benefit from my pain treatment decisions?
- Maleficence- What can I do to decrease harm?
- Justice- Did I do my best to protect the most vulnerable patient, treating his or her pain in the best possible way with respect and without discrimination?

(Bernhofer, 2012)

ANA Statement on The Ethical Responsibility to Manage Pain and Suffering (2017) – in development

Opiate Receptors in Brain

- Provision of analgesia & reward are linked
- Presence of acute pain → decreased euphoric effect of opioid
- Presence of addictive disease worsens experience of pain

ASPMN (American Society for Pain Management Nursing) & IntNSA (International Nurses Society on Addiction) Position

- Every patient with pain, including those with substance use disorders, has the right to be treated with dignity, respect, & high quality pain assessment & management
- Failure to identify and treat the concurrent conditions of pain & substance use disorders will compromise the ability to treat either condition effectively

( Oliver 2012)
Assessment

- Requires a conversation
- Should be ongoing
- More than “just a number”
- Focus on function

Prescribing and Administering Opioid Doses Based Solely on Pain Intensity: A Position Statement by the American Society for Pain Management Nursing® 2016

- Prescribing opioid doses based solely on pain intensity is problematic for many reasons including that pain intensity ratings are completely subjective, cannot be measured objectively, and are not repeatable findings even within the same individual
- Many factors in addition to pain intensity influence opioid requirements
- There is no research showing that a specific opioid dose will relieve pain of a specific intensity in all patients

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ASPMN Position Statement

- Use 10 step Universal Protocol approach for patients with persistent pain
  - Make a pain diagnosis with appropriate differential
  - Psychologic assessment, including risk of addictive disorder
  - Informed Consent
  - Treatment agreement
  - Pre/post intervention assessment of pain level & function
  - Appropriate trial of opioid therapy with or without adjunctive treatment
  - Reassessment of pain level & level of functioning
  - Regularly assess the “5As” of pain medicine
  - Periodically review pain diagnosis, coexisting conditions, including the presence of a SUD, & treatment plan
  - Documentation

5 As

- A – analgesia
- A – activities of daily living
- A – adverse effects
- A – aberrant behavior
- A - affect

ASPMN RECOMMENDATIONS

Assessment

- Offer further assessment for possible substance use disorder for patients with illicit or non-prescribed illicit substances found on urine drug testing
Case Study 1: Assessment Ortho Admit Note

• A 33-year-old female with a known history of IV drug abuse and recent hospitalization for abscess in the upper arm with MRSA
• Presented to the emergency room complaining of severe pain in her right knee.
• She reports that over the last 3 or 4 days, she has had increasing pain in the right knee with swelling in the knee and inability to move the knee.
• She reports fevers & chills with rigors yesterday and overall has been feeling poorly.
• Denies any trauma to the knee, has not had previous infections in the knee.
• The pain became quite severe tonight & she was unable to bear weight or move the knee at all prompting her to go to the emergency room for evaluation.

PAST MEDICAL HISTORY

• Seizure
• History of concussion with traumatic brain injury
• Headaches
• Asthma
• Urinary tract infection
• Hepatitis C
• Substance misuse disorder, tobacco use
• MRSA infection
• The patient reports she was in the process of moving and has put her things in storage and currently is without an address.
• She continues to use IV heroin on a regular basis. Usually injects in both arms, left leg. She denied injections around right knee.
• She was started on buprenorphine (Suboxone), however last use of IV heroin was just a few days ago.

Infectious Disease Note

• 33-year-old woman with a history of ongoing IV drug use & recent admission for arm abscess due to MRSA who presented with a chief complaint of 3-4 days of pain & swelling of right knee.
• She did not pick up prescription for trimethoprim-sulfamethoxazole (Bactrim) for treatment of her arm abscess, she does not remember which arm was affected.
• She continued to use IV heroin on a regular basis. Usually injects in both arms, left leg. She denied injections around right knee.
• She was started on buprenorphine (Suboxone), however last use of IV heroin was just a few days ago.
ED Nurses Note
- Date: 5/30/17 21:05
- Complains of RLE pain x 4 days.
- States that the pain is a 10/10 in severity.
- She denies any injury.
- Patient states "I didn't shoot up in that leg recently".
- Leg is visibly swollen & warm to the touch. Normal color.
- She also reports a fever at home but did not measure it.
- No other complaints. VSS
- Right knee fluid removed by MD
- Transferred to O.R. for surgery.

Nurses Notes
- 04:17: Admission notes
- Pt is alert/oriented x 3, admitted from PACU
- 11:23: IV acetaminophen (Ofirmev) given as ordered, oxycodone (Percolone) 10mg po pain states severe, good relief.
- 21:30: a/o x 3. restless & crying at times. Reports pain severe. dc’d IV hydromorphone (Dilaudid) & buprenorphine (Suboxone) ordered. Patient very upset about IV pain medications being dc’d. Oxycodone (Percolone) q 3 and acetaminophen (Ofirmev) given. Sleeping intermittently.

Nurses Notes
- Date: 6/1/17 01:26
- Medicated with oxycodone (Percolone) for 9/10 pain. OOB with 1 assist and the knee immobilizer.
- 15:48: Reported pain as severe and oxycodone (Percolone) changed to 15mg po q 3 hours; states beginning to feel better.
MD Note  Day 2
Medical consult was requested for pain co-management.
Recommendation:
• Hold buprenorphine (Suboxone)
• Continue with oxycodone (Percocet) while acutely in pain
• Later on might titrate them off and then resume buprenorphine (Suboxone)
• Could also transition over to buprenorphine(Subutex) prior to buprenorphine(Suboxone) as well would use acetaminophen with caution given history of Hepatitis C
• Avoid NSAIDs given Acute Kidney Injury

Social Service Note
• Date: 5/31/17 11:52
  She reports that she is in the Experience Wellness Program and that she did have a relapse.
  I offered the CSS program again and she became upset with me and said, “Why would I go now!”
• Date: 6/1/17 14:30
  I met with patient this afternoon to discuss her stay and behavior while at the hospital.
  She has been having trouble sleeping and like to rest during the day. We talked about her behavior toward staff and being respectful while she is here. She said “I’ll try.”

Active Medications on Day 2
Day 9: Substance Use Support Team

- Patient very sedated. Woke up when name called but fell right back to sleep so unable to answer questions.
- Pupils pinpoint.
- Asked patient if anyone was bringing her in any drugs.
- Last oxycodone (Percolone) dose was at 0600.
- Patient woke up enough to say, "No, I don't know why this is happening."
- Recommended urine for drug screen.

Substance Use Disorder NP Note on Day 9

- Polysubstance abuse: Recommendation:
  - Consider reduced dose of oxycodone (Percolone)
  - Alternate with acetaminophen (Tylenol) p.r.n. for pain
  - Consider reduced dose of gabapentin (Neurontin) d/t excess somnolence and history IVDU
  - Transition to buprenorphine (Suboxone) after oxycodone (Percolone) discontinued for > 48 hours
  - Toxicology Screen
  - Sitter in room to monitor patient

6/8/17 22:58: Nurse Notes

- Video monitor in use as ordered - patient noticed video system & became agitated and belligerent, stating "I don't want that thing in here watching me."
- Explained the necessity of the device. Video monitor was moved to a different spot in the room per patient request.
- Video tech notified staff that a male visitor had entered the room & handed her "something" from his pocket.
- Called security, went into patient's room.
- Visitor was in bathroom, explained that he should use the public facilities.
- Patient became irate & belligerence increased.
- Security arrived & a room search revealed a section of clear plastic bag with a white substance inside. Pittsfield PD was called. (visitor fled)
- Additional white substances were discovered in a hospital cup & this was turned over to security
- Police Officer arrived and spoke with patient
Tox Screen Day 9

• Positive for cocaine

Case Outcome

• Endocarditis ruled out
• Patient reports she is feeling better, less pain in knee and she is able to move it more.
• She is not interested in CSS after discharge, she is concerned she does not have housing and needs assistance with filling out paperwork.
• She reported that she may use “heroin a few times”
• Currently on Methadone Maintenance 50mg daily in divided doses (20-10-20).
• She will f/u @ Spectrum and this will be arranged.

Issues

• Delay in obtaining/verifying history of buprenorphine (Suboxone) & heroin use
• No initial tox screen done
• Room on hallway undergoing renovations
• Why did it take so long to get SUS team assistance?
• Better multimodal/non-opioid approach?
• Documentation does not reflect all the concerns about behavior, lethargy, pain rating vs. activity, etc.
• She has mentioned more than 1 outpatient program
Interventions

- Pharmacologic
  - Multimodal
    - Opioid
    - Non-opioid
  - Pre-emptive
    - RTC vs. p.r.n.
    - route
- Non-pharmacologic

“Opioid Debt”

- Patients physically dependent on opioids (methadone or buprenorphine) must be maintained on daily equivalence before ANY analgesic effect is realized with opioids used to treat acute pain.
- Opioid analgesic requirements are often higher due to increased pain sensitivity & opioid cross tolerance.
- Relapse to active drug use may be higher with inadequate pain management than with use of opioid analgesics.

ASPMN Position Statement

Recommendations

- Consider multimodal & integrative therapy options.
- Formal assessment tools & standard procedures are encouraged to guide individualized care & to limit legal liability.

- (ASPMN, Sept. 2012)
- (Chou, APS, ASA, 2016)
Multimodal Options

- Standard of care for all analgesia!
- Opioids
- NSAIDs
- Acetaminophen
- Gabapentin
- Ketamine
- Lidocaine infusions
- Regional
  - Blocks
  - Local anesthetics
  - PCEA
- Non-pharmacologic

Methadone (Dolophine)

- Multiple analgesic mechanisms of action
  - Active at mu, delta & kappa opioid receptors
  - NMDA receptor antagonist
  - Serotonin & norepinephrine reuptake inhibitor
- Analgesic option for syndromes poorly responsive to other opioids
- Used for maintenance therapy to reduce craving & prevent withdrawal

Methadone: Clinically Important Characteristics

- Highly lipophilic
  - 85% oral bio-availability
  - Readily crosses blood-brain barrier
- Highly protein bound
- Wide distribution
  - Slow elimination
  - Long, highly variable half-life (5-100+ hours, average 20)
- Duration of action
  - Initial dosing: 4-6 hours
  - 8-12 hours with accumulation
  - Methadone (Dolophine) maintenance dosed every 24 hours does not provide analgesia beyond 6-8 hours
- Wide individual variability in pharmacokinetics & response
- Potential to prolong QTc
Methadone

- Chronic pain
  - Significant tolerance is often seen in patients with past history of opioid abuse, may require higher doses
  - High doses of methadone for chronic pain has been seen to result in serious side effects (Vadivelu, 2014)

- Maintenance
  - Higher risk of toxicity, due to low therapeutic index with higher risk of accidental OD & methadone poisoning
  - Possesses NMDA blocking properties, can alter central pain processing (Vadivelu)

Methadone: Acute Pain & Maintenance Therapy

- Continue the once daily dose through peri-operative period (Stromer)
- To treat pain may need 1-5 x higher dose & shorter intervals
- Substitution with fentanyl for methadone for the patient on methadone maintenance, better to use oxycodone or hydromorphone, not morphine due to metabolites
- Avoid mixed agonist/antagonist (butorphanol) they will precipitate withdrawal
- Evaluation effect carefully.
- Risk of cumulative effect & OD

Case Study 2

- She states the pain began 2 days ago and is increasingly gotten worse. She also complains of nausea and vomiting.
- She recently had a laparoscopic cholecystectomy
- She has a complicated medical history & she still actively uses heroin with most recent use being 3 weeks ago.
- She recently started methadone 5 days ago.
- She states abdominal pain is mostly in the right upper quadrant but radiates throughout her abdomen. She appears to be peritoneal on exam. She states that with the pain she experiences fevers and sweats.
- A CT scan demonstrated fluid consistent with possible blood in the bilateral pelvic gutters as well as right upper quadrant. A ultrasound of the ovary also demonstrated fluid in the pelvis with a painful exam.
MEDICAL HISTORY

(1) Cocaine abuse
(2) Cholecystitis
(3) Depressed
(4) Opiate addiction
(5) Postoperative hemorrhage
(6) Abdominal pain

PAST SURG HISTORY:
(1) S/P laparoscopic cholecystectomy

ASSESSMENT AND PLAN

• PROBLEM LIST:
  • Postoperative hemorrhage

• Plan:
  • Type and cross
  • Transfuse 2 units packed red cells
  • IR for intervention
  • ICU admission for monitoring with q.6 hours CBCs
  • Pain/nausea control
  • Bed rest
  • Social work consult for recent heroin abuse
  • N.P.O.
  • IV fluid resuscitation

• Pain ratings
Analgesics

- Fentanyl – in OR
- Hydromorphone (Dilaudid) – ED x 2, ICU x 2 and IMC x 1
- Ketamine – in ED & PACU; 2 mcg/kg/hour; started in IMC
- Oxycodone (Percocet) – 3/24 10 mg x 2
- Ketorolac (Toradol)
- Morphine – in ED
- Methadone – 30 mg 3/24
- Ondansetron (Zofran) in ED
- Sertraline (Zoloft)
- Acetaminophen ordered but not given

Anesthesia (Acute Pain Consult) Note

- Subj. Pain Score (out of 10): 4
- Objective Pain Score: Moderate
- Pain Control: Adequate
- Acute Pain Service Summary: good pain control w/current regimen, continue present treatment
- Additional Comments:
  - Ketamine infusion started with good relief. Patient should be restarted on methadone for opiate need coverage. Ketamine infusion does not replace need for replacement of methadone.

Nurse Notes: POD 1

- 16:15
- OOB & ambulated in the hallway
- Medicated with scheduled methadone & 10mg oxycodone (Percocet) with good effect.
- Reports that her pain is 2/10.
- Ketamine (Ketalar) drip discontinued as ordered
- Started on a general diet. States that she tolerated diet well. OOB voiding in the bathroom.
- Planning to discharge this evening.
- States that her mother can bring her home.
Case Comments

• Success with ketamine & multimodal plan
• Discharge instructions

Buprenorphine

• Parenteral & transdermal approved for pain
  — NOT addiction treatment
  — Cannot be used off-label
• Sublingual approved for addiction
  — NOT pain treatment
  — Can be used off-label

Buprenorphine

• Binds tightly to the mu opioid receptor
• Does not “turn on” the receptor as completely as a full mu agonist opioid
• Sublingual tablets (film) require at least 20 minutes for effect
Buprenorphine

- Half life is about 37 hours
  - Analgesic half life is shorter
  - 3 doses per day needed to treat pain (Vadivelu, 2014)

Buprenorphine Strategies: Options

- Continue buprenorphine maintenance therapy & titrate short-acting opioid analgesics (for pain of short duration)
- Divide buprenorphine dose to every 6-8 hours
- Discontinue buprenorphine maintenance therapy 72 hours prior & use opioid analgesics
- Discontinue buprenorphine, treat opioid dependence with methadone & use short acting opioids to treat pain

Case Study 3 Buprenorphine

- 27 year old male admitted on 5/14/17 with L neck pain swelling that began over a week and a half ago.
- Patient is an IV drug user and does inject into his neck regularly.
- Currently on buprenorphine (Suboxone)
- Patient denies difficulty swallowing, speaking or breathing. He denies fevers or chills, but has significant pain associated with the swelling.
PAST MEDICAL HISTORY
(1) Epididymal cyst
(2) Abscess and cellulitis
(3) Suicidal ideation
(4) Unspecified mood [affective] disorder
(5) Substance induced mood disorder
(6) Social anxiety disorder
(7) Opiate dependence
(8) Major depressive disorder
(9) IV drug user
(10) Substance abuse

Social Worker Note
• Patient seen due to homelessness, IV drug use.
• Does not identify any needs at this time, states he "has a couple of things pending."
• Offered support with Suboxone clinic. Pt declines.
• Not unreceptive to support. SW to follow.

Infectious Disease Consult
• Febrile. Drainage from abscess continues to decrease.
• A medical consult for dealing with his substance use was obtained
• His cultures now are primarily anaerobic with pure culture of microaerophilic Streptococcus & a 2nd culture, which has anaerobic Gram-negative rods. His white count has normalized.
• RECOMMEND: Would discontinue vancomycin at this point. Continue the IV clindamycin. Continue IV heparin for his deep neck vein thrombus. He can be transitioned to oral clindamycin once adequate response to antibiotics and drainage has been established.
Medications

- Buprenorphine (Suboxone)
  - Dose adjustment
- Ketorolac (Toradol)
- Oxycodone (Percolone)
- Hydromorphone (Dilaudid)
- Gabapentin (Neurontin)
- Clonidine (Catapress)
- Ibuprophen (not taken)

Pain

- Most pain ratings mild – moderate
- 4 day Los

Medicine Consult

- Patient has long standing history of SUD, recently using IV heroin but stopped when he noticed an infection in his neck.
- He transitioned to maintenance assisted therapy through Clean Slate with buprenorphine (Suboxone) 12mg daily prior to seeking medical attention for neck infection.
- Buprenorphine (Suboxone) discontinued on admission and patient started hydromorphone (Dilaudid) for pain control, d/c’d 5/15/17 for transition to buprenorphine (Suboxone) via COWS protocol 5/16/17.
- Ketorolac (Toradol) 30mg q6hr prn for pain management.
- CDWx d/c’d 5/17/17 and patient transitioned to home dose buprenorphine (Suboxone) 8mg in the morning & 4mg in the evening.
Substance Use Support Team

- CDWS 9 for body aches 5/30, abdominal cramping, restlessness, anxiety.
- States the buprenorphine (Suboxone) 2mg that he got earlier helped very little.
- Patient informed that buprenorphine (Suboxone) dose is changed to 12mg daily.
- Pt states he has an appointment tomorrow at suboxone clinic. States he hopes to discharge tomorrow.
- States Dr. S orders his gabapentin (Neurontin) and he sees her on Friday.
- Became more restless when discussing aftercare plans.
- Patient is homeless and states he will return to that situation.
- States he has to locate his belongings but would consider CSS. "I am not ruling that out." Given CSS brochure. Will meet with patient on Thursday for follow up.

Case Management Progress Note

- Patient medically cleared for DC today.
- Patient continues to desire to return to prior living arrangements: homeless and is not interested in a shelter or alternative living arrangements at this time.
- Patient has FU with Dr. on 5/30/17 at 1350. Has appointment at Suboxone clinic. Patient DC into community and patient comfortable with DC plan.

Case Comments

- Was analgesic plan effective?
- What do you think of discharge plan?
  - Could we do anything differently?
Naltrexone (Vivitrol)

• Option for Maintenance Opioid Therapy
• Monthly injection
• Oral daily
• Must be off opioids for 7 days prior to starting
  – Peak plasma 2-3 days
  – Begins to decline in 14 days
• Has no analgesic properties

Naltrexone (Vivitrol)

• Issue if acute pain management needed
• Can overcome blockade with 6-20x usual opioid dose without significant respiratory depression or sedation
  – Must monitor patient very closely
• Optimal discontinue oral 72 hours prior to elective surgery
• IM depot discontinue 1 month prior to elective surgery

Case Study 4

• 32 year old male (5/13 admit)
• Level 1 trauma was stabbed by a 6 inch blade outside a restaurant one block from the hospital. He drove immediately to the ER. He reports only one stab wound to his mid upper abdomen. No SOB.
• Takes ledipasvir/sofosbuvir (Harvoni) and chronic opiate medications. No allergies. Says he ate lunch earlier today around 2PM. Had a surgery on his right wrist for a previous stab wound.
• PAST MED HISTORY:
  • Opiate addiction
  • Hepatitis C
  • Cocaine dependence
ED Note

- History of Heroin use off & on for 15 years following pain med abuse after motorcycle crash
- ETOH abuse
- Admission for opiate detox x 2
  - Relapse 3/22/16
  - Now on naltrexone (Vivitrol) through on-call clinic in Northampton
  - States due for dose on day of admission
- Cortisol injection right shoulder

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Appears only fentanyl given in ED
? Timing of urine spec? OR/PACU opioids

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MD Summary

- 32 yo male with PMH of substance abuse and Hep C who sustained a stab wound to the upper abdomen on 5/13/17. A liver laceration was discovered on emergent exploratory laparoscopy; bleeding was controlled with Surgicel.
- On POD#1, he had pain control issues. He is on a naltrexone injection monthly, but states he missed his injection which was supposed to be administered a couple days prior to admission. Naltrexone was not given.
- He was given a combination of narcotics and non-narcotics for post-operative pain control. He was also started on a ketamine drip which was started by the anesthesiologist postoperatively.
- The patient was also started back on his home medications, including ledipasvir/sofosbuvir (Harvoni)
Nurses Notes

- Date: 5/14/17 07:33
- Scheduled ketorolac (Toradol) IVP for pain control.
- Pt requesting Nicotone patch & home dose of Harveni
- 22:54
- OOB AD LIB, ambulating in hall >40ft.
- Ketamine (Ketalar) drip started per med orders. VSS throughout.
- 5/15/17 06:45
- A&Ox3, no hallucinations. EtCO2 monitoring in place.
- Slept well over night, rates pain 6-7/10 in upper medial abdomen.
- Ketamine in use, scheduled ketorolac (Toradol) IVP given, and 5mg oxycodone (Percolone) given x2, pt rates pain 5/10 after oxycodone (Percolone)

Nurses Notes

- Date: 5/15/17
- Anesthesia in to see patient.
- D/C ketamine infusion
- Reporting minimal pain levels 2-3/10 at worst
- States good pain control with ketorolac (Toradol), Lidoderm patch and acetaminophen (Tylenol)
- Reluctant to take narcotics due to history. Would like to avoid narcotics if possible.
- 4% lidocaine patches purchased at Community Pharmacy and brought up to patient.
- Patient ambulated independently out with significant other.

Analgesics Administered

- Acetaminophen 650 mg q 6
- Gabapentin (Neurontin) 200 tid
- Ketamine 2mcg/kg/hr via PCA
- Ketorolac (Toradol) 15mg every 6 hours
- Oxycodone (Percolone) 5 mg po mod-severe pain q 4 p.r.n.
- Lidoderm patch
MD Discharge Instructions

• The patient was instructed to follow-up in his clinic for his naltrexone injection.
• The patient was given the option of discharging with oral narcotics.
• Patient stated he did not want to be discharged with narcotics due to his drug abuse history. He agreed to follow up in his clinic within the next few days. He was instructed to inform them of his hospital course and surgery.
• Take acetaminophen (Tylenol) as needed for pain.
• Take gabapentin (Neurontin) as prescribed for the next 1-2 weeks for post-op pain.
• 2 day LOS

Case Comments

• Any suggestions to improve care in this patient?
• How do think the analgesic plan would have worked if the patient had received his naltrexone (Vivitrol) injection?

Evaluation

• Starts with a reasonable goal
• Good assessment, reassessment
  – What is the pain due to?
  – Injuries?
  – Complications?
  – Withdrawal?
• Focus on function
• Ongoing
• Coordinated transfer of care
Skilled Communication

- Motivational interviewing
- Respect

Trauma Case Study

- 35 year old male admitted on May 19, 2017 with Level I MVC head on collision unrestrained, with the following injuries:
  - Grade 4 spleen, IR embolization splenic artery
  - R femur comminuted fracture
  - Multiple lacerations
  - Right frontal process of the maxilla fracture
  - Acute nondisplaced fracture of the superior, anterior nasal septum
  - Degloved nose and L eyelid
  - Small left pneumothorax
  - L3,L4 Transverse Process fractures.

- PAST MED HISTORY:
  - Hepatitis C
  - Heroin abuse
  - Opiate withdrawal

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<td>Ur Methadone, Quod</td>
<td>POS H</td>
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<td>Ur Amphetamines Screen</td>
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<td>Ur Barbiturates Screen</td>
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<td>Urine Cannabinoids</td>
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<tr>
<td>Plasma/Serum Alcohol</td>
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Timeline
5/19: Admission
5/19: OR to repair facial injuries to ICU post-op
5/20: OR for IM rodding of femur
5/22: OR for external fixation of ankle
5/25: Transfer from ICU to ortho unit
5/30: Discharge

Medications
• Acetaminophen (Ofirmev) 1000 mg q 6 hours 5/19-5/20
• Fentanyl 25 mcg in PACU 5/22
• Gabapentin (Neurontin) 5/23; dose increase on 5/27
• Hydromorphone (Dilaudid) 0.5-2mg IV q 2 hours severe pain
• Lidoderm patch 5/27
• Oxycodone (Percocet) 5 mg 5/19-5/30 moderate pain
• Lorazepam (Ativan) FOR AGITATION OR ANXIETY PRN
• Melatonin
• Methadone (Dolophine) 80 mg po daily

Social Service Progress Note
• Met with patient for support & to review results of toxicology report.
• CAGE assessment performed which was positive on 2 of 4 items.
• Patient is in Methadone program.
• We discussed some unresolved early childhood issue
Nurses Note on Ortho Unit

- Date: 5/25/17 22:48
- Resting with right leg elevated on pillows.
- Medicated with 1 mg IVP Dilaudid x2 this shift and Percolone x1. Reports little effect. Calm and relaxed after pain medication.
- Date: 5/26/17 04:42
- MED FOR PAIN WITH 2 PERCOLONE THAT DIDN'T HELP MUCH. GIVEN DILAUDID 1 MG IVP BETTER PAIN CONTROL
- 5/26 10:36
- MEDICATED WITH PERCOLONE 10 MG PO DANGED OUT OF BED TO WHEELCHAIR WITH 2 ASSIST.
- Date: 5/27/17 13:56
- C/O pain and medicated with PO Percolone as ordered with minimal effect, repositioning and ice given for comfort, Ativan PO administered for anxioiusness.
- Patient c/o left flank pain

- Date: 5/28/17 12:24
- Discussed plan for discharge home on Tuesday.
- Patient given Percolone 5mg po for 4/10 pain. Dilaudid given at 0930am. Asking for more Dilaudid. Will reassess his pain.
- Date: 5/28/17 23:00
- Percolone and Dilaudid IVP for pain with tolerable relief.
- Ativan x1 for anxiety with fair relief.
- Date: 5/30/17 12:02
- Medicated with percolone 10 mg po with relief
- Out of bed with therapy
- Discharge instructions given and understood

DISCHARGE

- Home with services
- MED LIST AT DISCHARGE:
  - Colace (Docusate Sodium) 100 Mg Cap 100 Mg PO BID PRN
  - Oxycodone (Percolone) 5 Mg Tablet 5-10 Mg PO Q6H PRN
  - Aspirin 325 Mg Tab 325 Mg PO BID
  - Gabapentin (Neurontin) 300 Mg Capsule 300 Mg PO TID
  - Methadone (Methadone Hcl) 10 Mg Tablet 80 Mg PO DAILY
Discussion/Issues

- Pain reassessment
- Requests for pain medication
- Sources of pain
- Was methadone provider contacted?
- Unexpected admission

Conclusion

- Assessment is essential
- Multimodal approach
- Use ALL resources
  - Social worker
  - Behavioral health
  - Outpatient providers
- Treat patient with respect

References