Foundations III Curriculum
Guided Small Group Experience

Special Populations
"Management of the Psychiatric Patient in the ED"

- **Agenda and Learning Objectives:**
  - Case Part I – Initial Management of the Severely Agitated Patient (20 min)
    - Discuss the first steps in approaching the agitated patient
    - Identify how and when to apply physical restraints
    - Discuss when to use chemical sedation and how to choose the most appropriate medications
  - Case Part II – Medical Evaluation (5 min)
    - Discuss how to differentiate a primary psychiatric condition from another organic cause of psychosis and/or agitation
    - Identify which labs/imaging (if any) should be performed to medically clear a psychiatric patient
  - Case Part III – Management of the Long-Term Psychiatric Boarding Patient (15 min)
    - Define medical detainment versus psychiatric hold
    - Discuss best practices for long term boarding of psychiatric patients
    - Discuss how the ED can decrease boarding and improve psychiatric care
  - Case conclusion (10 min)
    - Review Session Teaching Points

- **Case Part I – Managing the Severely Agitated and Acutely Psychotic Patient (20 min)**
  CP is a 21-year-old male who was brought in by EMS for agitation and "strange" behavior. EMS reports that the patient was found running through traffic yelling incoherently without a shirt on. Due to the patient's acute agitation and altered mental statu,s EMS was unable to obtain a past medical or social history and no vital signs were taken. EMS has the patient's hands tied to the gurney but the patient is kicking his legs and screaming "They are coming, we are all going to die!"

- **Discussion Questions and Teaching Points:**
  - **What are the first steps in managing an agitated patient?**
    - Your number one priority is to ensure the safety of the patient, ED staff, yourself and the other ED patients
    - Your first step should be to attempt to verbally de-escalate this patient → however, this may not be appropriate or effective in an extremely aggressive patient and physical restraints may be required
    - Activate your hospitals protocol for physical restraints

  - **What factors predict violent behavior in the ED?**
    - Male gender
    - Arriving in police custody
    - Being a victim of violence or having prior history of violent behavior
    - History of drug and alcohol abuse
    - Psychiatric history (schizophrenia, personality disorder, psychotic depression)

- **What are the different types of physical restraints?**
  - Mitten restraints
  - Soft wrist restraints
  - Spit shields
  - Vests and lap belts
  - Arm and leg soft restraints
  - 4-point leather restraints

- **How do you apply physical restraints?**
  - Before moving the patient from the gurney to the bed, make sure you have security with restraints and a least 5 people to assist you
  - Put on personal protective equipment and remove anything that can be used as a weapon (stethoscope, neckties, necklaces, land yards with ID)
  - As team leader you should designate roles, control the head and monitor the airway
  - Have a team member hold each extremity firmly while being careful to not injure the patient.
  - Restrain extremities by placing one hand above and below the main joint
  - While restraints are being placed, it is important that you explain to the patient what you are doing and that everything is being done in the best interest of his safety and the safety of the people around him

- **What do you do after the restraints are placed?**
  - It may have been safer for staff to initially restrain the patient in the prone position, but the patient cannot stay this way due to potential asphyxiation
  - Elevate the head of the bed to avoid aspiration
  - Make sure you know your hospitals policy regarding the type of observation required for restrained patients
    - IE: Monitoring vital signs, skin checks, range of motion, circulation, hygiene
  - Document the time restraints were placed, the indication for restraints and de-escalation methods attempted prior to the application of physical restraints
  - Go back and reassess the patient every 30 minutes
  - Restraints orders expire based on age:
    - $\geq$ 18 years old = 4 hours
    - 17-9 years old = 2 hours
    - $\leq$ 8 years old = 1 hour
  - Patients who use sign language must have their hands freed for a short time every hour (if safe) in order to communicate

- Think of physical restraints as a means to facilitate chemical sedation → physical restraints should be removed as soon as safely possible

- **When should chemical sedation be used?**
  - Once physical restraints are placed, you should offer the patient medication
  - If the patient refuses medication and is still aggressive, it should be given involuntarily usually via the IM route as this is safer than establishing an IV
  - The purpose of chemical restraints is to quickly and safely tranquilize the patient in order to control their aggressive behavior and allow you to perform your medical evaluation

- **How do you choose the most appropriate medications for rapid tranquilization?**
  - There are two main classes of medication used in the acutely agitated patient**:**
    - Antipsychotics: typical (Haldol) and atypical (Geodon, Zyprexa)
    - Anxiolytics: benzodiazepines (Ativan)
  - Typical antipsychotics have an increased risk of QTc prolongation and torsades de pointes and should be avoided in patients with a history of cardiac arrhythmias
  - Atypical antipsychotics have fewer adverse reactions such as extrapyramidal effects, tardive dyskinesia and QTc prolongation
  - Benzodiazepine have a wide therapeutic index but should be used sparingly in patients who have taken other sedating medications or intoxications
  - It is always safer to administer medication IM than starting an IV
  - Remember that the onset of IM medication is less predictable → be cautious when re-dosing these medications

- **What are the best regiments for chemical sedation in the ED?**
  - Traditionally, Haldol (5-10 mg IM) and Lorazepam (1-2 mg IM) has been the most used regiment
  - However, the newer atypical antipsychotics generally have a better side effect profile (less QTc prolongation, less EPS symptoms), a faster onset of effect and more tranquilization rather than frank sedation when compared to Haldol/Ativan
    - Olanzepine (Zyprexa 10 mg IM) has shown superior effect for patients with psychosis, bipolar mania and Alzheimers's dementia when compared to Haldol
      - Zyprexa has a long half-life (20-50 hrs) and is synergistic with other CNS depressants, therefore, it shouldn't be used in intoxicated patients or in combination with other meds (ie Ativan)
      - It also has significant anti-cholinergic effects.
    - Ziprasidone (Geodone 20 mg IM) also has advantages over Haldol including faster onset, lack of over-sedation, increased efficacy, reduced EPS and easier transition to oral medications
      - FDA approved for schizophrenia and bipolar mania
    - Risperidone PO (Risperdal) and Olanzapine ODT (Xydis) is also available and as an effective option for patients willing to take oral medications
    - Aripriazole (Abilify) is another option and though it has not been studied in the ED population, there is extensive data in the psychiatric literature for severe agitation related to bipolar mania or schizophrenia

- Zyprexa and ODT Risperdal have been studied in the undifferentiated ED patient population and have been shown to be safe though the studies are small
- The atypical anti-psychotics are more expensive and they are not readily available in many EDs
- **Bottom line:**
    - Haldol (5-10 mg IM) and Ativan (1-2 mg IM) is still first line for agitation in *undifferentiated medical* patients
    - Can consider Geodon 20 mg IM for first line in patients with agitation due to *known psychiatric disorders* (watch QTc)
    - Zyprexa 10 mg IM can be considered for *primary psychiatric agitation* in the **absence** of other CNS depressants
    - More studies are needed for Geodon and Zyprexa in the undifferentiated ED patient but will likely become first-line in the future
    - Agitation + alcohol or benzo withdrawal suspected = lorazepam 1-2 mg IM with rapidly escalating doses once an IV has been established
    - Agitation + acute intoxication with CNS depressant (ETOH) = Haldol

- **What would you use in an elderly patient?**
    - Caution should be used in elderly patients given co-morbidities, other medications with potential interactions including prolonged QTc, CNS depression and erratic absorption and clearance
    - Oral medications should be used if possible (Risperidone ODT 1 mg, Quetiapine 25-50 mg PO)
    - If the patient is unable or unwilling to take oral medications, Haldol is generally the preferred agent in the elderly
    - Use very small doses of IM medications (Haldol 1-2 mg IM) or even smaller doses of IV (Haldol 0.5 mg IV) → you'll be surprised at what works!
    - Avoid benzodiazepines in elderly due to increased risk of respiratory depression and delirium
    - Be careful in the elderly → differentiate delirium from agitated dementia as elderly patients with delirium have a 2-3x increase in mortality at 30 days
    - If unsure, err on the side of diagnosing delirium and admitting for further evaluation rather than attributing their agitation to underlying dementia

- **Should you give Cogentin or Benadryl with your anti-psychotics?**
    - No
    - Overall, EPS side effects from a single dose of anti-psychotics is very uncommon → there is no role for using Cogentin or Benadryl to *prevent* symptoms, just treat the symptoms if they occur
    - Cogentin can also worsen delirium
    - The use of Benadryl has been shown to increase sedation and not decrease side effects

❖ **Case Part II – Medical Evaluation (5 min)**

The patient's family arrives shortly after EMS and informs you that the patient has a history of schizophrenia and polysubstance abuse including marijuana, methamphetamine and alcohol. They tell you that he is supposed to be on olanzapine but he has been using meth this week and they do not think he has been compliant with his medication. Your patient is now in four-point hard restraints and given his history of schizophrenia and possible intoxication you elect to

chemically sedate with Geodon 20 mg IM. You obtain an EKG afterwards which shows a normal QTc. After 15 minutes he is sedated and you complete your physical exam which is otherwise normal.

- **Discussion Questions and Teaching Points:**
  - **What historical clues can be helpful in differentiating a primary psychiatric condition from another organic cause of psychosis and/or agitation? What are red flags that there might be a medical cause of symptoms?**
    - Always attempt to obtain collateral information from friends and family:
      - Past medical history, psychiatric history, substance use, onset of abnormal behavior (sudden vs progressive), recent sick symptoms, potential ingestions
    - Do a thorough physical exam and look for any signs of trauma, toxidrome, needle track marks, focal neurological deficit
    - Search patient's personal items for medications, drug, or other ingested toxins
    - The rapidity of onset can help → organic disease is often more rapid than primary psychiatric disorders
    - Other somatic complaints may point to an organic cause
    - Be highly suspicious of an organic process in the elderly agitated patient
    - Visual hallucinations tend to result from organic pathology

  - **How do you "medically clear" a psychiatric patient?**
    - Perform a complete history of physical exam in order to assess for any possible organic cause of their psychosis
    - Routine labs and imaging on patients with a non-focal exam have been shown to be costly and unnecessary
    - ACEP guidelines to not recommend routine urine toxicology drug tests on a patient with a benign exam
    - Depending on your institution, some labs are required for transfer to a psychiatric facility
    - Consult psychiatry for any patient that you believe is a danger to themselves, a danger to others or unable to care for themselves

- **Case Part III – Long Term Care of the Psychiatric Patient (10 min)**

  After 4 hours, all restraints are removed and the patient has woken up from sedation. As you re-evaluate the patient you realize that he thinks he is talking to his deceased Grandfather. You notice that his speech is tangential and he is clearly responding to internal stimuli. He tells you that the year is 2030 and apes rule the earth. You determine that this patient is acutely psychotic and unable to care for himself (gravely disabled) so you consult the psychiatric team who places him on a legal psychiatric hold.

- **Discussion Questions and Teaching Points:**
  - **What is the difference between a medical detainment and a psychiatric hold? What physicians can put patients on these various legal statutes?**

    Medical Detainment:
    - If the patient has a medical or psychiatric emergency but is refusing care, the physician must decide whether the patient has capacity refuse care (see Session 1 on Capacity and AMA)

- If the physician is either unable to assess capacity due to agitation, intoxication or other factors or determines that the patient does not have capacity due to psychiatric illness or other altered mental state, the physician can place the patient on a medical detainment in order to evaluate the patient and provide care
- This can be done by any licensed physician

Psychiatric Hold:

- An involuntary detainment that allows lawful restraint of a person who is found to be a danger to themselves, a danger to others or unable to care for themselves (gravely disabled)
- While on an involuntary detainment, the patient maintains all human rights under the constitution and state laws
- The person maintains their ability to refuse care (excluding psychiatric medications)
- This is a legal hold that can be placed by a police officer, psychiatrist or other physician (depending on the state)

- **If a psychiatric patient is on an involuntary hold, what should you/can you do if they refuse lab work or other medical evaluation?**
  - A patient under a psychiatric hold may or may not have capacity → however, most ethicists agree that acutely suicidal patients lack capacity as they are in an irrational state
  - If the patient does not have capacity and you have reasonable concern for a life-threatening injury or disease process, you can physically and/or chemically restrain in order to evaluate the patient
  - However, if you determine there is no acute medical emergency (with physical exam +/- lab work/imaging as needed), you can no longer force cares on them unless they are being aggressive and need to be sedated for their own, staff or other patient safety

- **Can you force patients on a psychiatric hold to give blood work or take medications after the initial evaluation has determined there is no acute medical emergency? What if they can't be transferred without blood work?**
  - No
  - Once the patient is committed psychiatric medications can be given, **no** other medication can be forced
  - Cannot force patients to give blood even if their refusal limits their transfer

- **Do all patients need to be placed on an involuntary hold before being admitted to inpatient psychiatric care?**
  - No, patients do not need to be on an involuntary hold before being admitted for psychiatric care → patients can elect to enter the hospital as a voluntary admission

  What if they are being admitted voluntarily but then change their mind? Or refuse transfer?
  - If the patient suddenly wants to leave the ER, the psychiatrist or another doctor can medically detain the patient to determine if they are safe to leave and have the capacity to decide to leave → if not, they will need to be placed on a legal psychiatric hold
  - If the patient does not meet hold criteria and is determined to have capacity they are free to leave

- Depending on the state, the patient may be required to give 3 days notification before leaving inpatient treatment so that the psychiatric team has time to apply for involuntary commitment

❖ **Case Part III Continued**

The hospital is full and there are no available inpatient psychiatric beds in the county at this time.

- **What is a good standing regiment for continued agitation in the ED (i.e. what PRNs are generally best to order and how often)?**
  - Once you have physically and chemically controlled the acutely psychotic/agitated patient, you must be ready to manage continued behavioral disturbances
  - It is important to know what medications the patient is already taking and generally continue those
  - You can give Zyprexa (10 mg IM)
    - This medication can be given up to 3 times, with 2 hours after the first dose and 4 hours after the second dose for a total of 30 mg/day
  - Can also consider ODT Risperidone (2 mg) or Seroquel (50 mg) if the patient is willing to take oral medications
  - Do not give a typical antipsychotic to a patient who is already on a standing atypical antipsychotic as this decreases the therapeutic effect of the atypical
  - Physical restraints are never a PRN order.
    - If patient requires restraints, a physician must first evaluate the patient and document why the restraints are necessary

- **What are the best practices for taking care of long term psychiatric boarders in the ED?**
  - All patients on a psychiatric hold require a 1:1 sitter in order to ensure safety
  - Anti-depressants do not act acutely to treat depressed and suicidal patients → therefore, these patients must be closely monitored to help prevent acts of self-harm and are unlikely to help in the acute setting
  - The American Psychiatric Association (APA) guidelines recommend gradually tapering antipsychotics to avoid withdrawal symptoms and minimize the risk of relapse → if you know the patient's dose of anti-psychotic, it is generally recommended to continue them in the ED
  - If anti-psychotics medications are going to be switched they need to be carefully tapered, this should be deferred to the inpatient psychiatric team
  - Psychiatric patients often have chronic medical conditions such as diabetes and hypertension so make sure to order all home medications and repeat labs (such as finger stick blood sugars) as needed
  - In a busy ED, after multiple sign outs, it is easy for the physician to forget about the psychiatric borders → remember to re-evaluate these patients regularly, checking vital signs and updating progress notes every 4 hours

- **What can we do as ED physicians to decrease boarding and improve the care of psychiatric patients in the ED**
  - Boarding in the ED provides sub-optimal quality of care for the psychiatric patient and utilizes resources for other medical patients

- Ways to reduce boarding of psychiatric patients in the ED:
  - Have a psychiatrist available to evaluate patients and decided whether or not they meet hold criteria
  - Create a quite observation unit where psychiatric patients are separated from the chaotic ED
  - Have a case manager to assist in finding available inpatient beds and coordinates timely transfers to psychiatric facilities
  - If patient is discharged from the ER, make sure to provide outpatient resources and ask your social worker to help coordinate psychiatric aftercare
- Consider invest in community crisis services and outpatient psychiatric care
  - You can donate to the Treatment Advocacy Center (national non-profit organization dedicated to treating people with severe mental illness) https://interland3.donorperfect.net/weblink/WebLink.aspx?name=E49040&id=5
  - They also have a list of mental health resources listed by state: http://www.treatmentadvocacycenter.org/browse-by-state

❖ **Case Teaching Points Summary**

- Initial Management of the Severely Agitated Patient – Physical Restraints
  - First priority is to ensure safety of the patient, staff and other ER patients
  - If verbal de-escalation does not work, activate your hospital's protocol for physical restraints
  - Use personal protective equipment and organize a team of 5 people
  - Clearly explain to the patient what you are doing and why it is important
  - After applying physical restraints keep the patient in the supine position with the head of the bed elevated

- Initial Management of the Severely Agitated Patient – Chemical Sedation
  - The purpose of chemical sedation is to quickly and safely sedate the patient so that you can perform your medical evaluation and remove physical restraints
  - There are many medications to choose from, make sure you are choosing the medication based on the most likely cause of agitation
  - Take into consideration the patient's age and comorbidities before administering any medication
  - It is almost always safer to administer medication IM than starting and IV
  - Haldol is the preferred agent for agitation in the elderly and should be started in small doses (0.5 mg IV or 1 mg IM)
  - Haldol (5-10 mg IM) and Ativan (1-2 mg IM) are the preferred agents for chemical sedation of the *undifferentiated* agitated ED patient
  - Geodon (20 mg IM) or Zyprexa (10 mg IM) are options for the agitated psychiatric patient → avoid Zyprexa in patients on other CNS depressants (including alcohol)
  - If patients will take PO, Risperidone (1-2 mg PO ODT) is another option

- Medical Evaluation of the agitated patient
  - Once aggressive behavior is controlled, perform a primary survey and remove physical restraints

- Labs and imaging will depend on the history, physical exam and overall clinical suspicion for organic pathology → routine labs are not recommended
- Be very suspicious of an organic process in the agitated elderly patient
- Consult psychiatry for any patient that you believe is a danger to themselves, a danger to others or unable to care for themselves

- Management of the Long-Term Psychiatric Boarding Patient
  - In an altered patient that lacks capacity to refuse care (or the physician is unable to determine capacity initially), the physician may place the patient on a medical detainment
  - If the patient is thought to be a danger to themselves, a danger to others or unable to care for themselves, a psychiatrist may place them on a psychiatric hold (lawful detainment) → in some states, any physician can do this
  - Remember you can't force care on patients against their will (including blood draws) simply because they are on a psychiatric hold unless you have a high suspicion there is an underlying, life-threatening medical emergency
  - Psychiatric medications can be forced once the patient is on a legal hold → you should do this in consult with your psychiatrist
  - Best PRN's are Zyprexa (IM) or Risperidone (ODT) or Seroquel (PO)
  - Can think about adding Ativan → don't mix with Zyprexa!
  - Restraints are never PRN orders
  - Make sure to reassess all boarding patients and order home psychiatric medication to avoid withdrawal
  - Remember underlying medical problems and ensure they are treated and followed while the patient is boarding
  - Involve case managers and psychiatric consulting team early
  - Know your states laws and treatment options
    - http://www.treatmentadvocacycenter.org/browse-by-state

❖ **Facilitator Background Information**

The Emergency Department is often utilized as the safety net for urgent and emergent mental health problems. According to the CDC's 2015 National Hospital Ambulatory Medical Care Survey, there were 136.9 million visits to the ED with mental health disorders making up 5.7 million of them (1). As the number of mental health related visits to the ED continues to increase, it is crucial that ED physicians know how to safely control the violent psychiatric patient and quickly evaluate for possible organic causes of aggressive behavior.

Patients suffering from substance abuse and mental health disorders have often utilized all social support from their family and friends by the time they find themselves in the Emergency Department (2). These patients are often both physically and verbally abusive to ED staff and can be difficult to manage. However, as health care workers, we must remember to stay mindful of our professional duty to provide the best care we can to each patient. With that said, it is also imperative that we keep ourselves and our other patients safe. Violence against health care providers is a serious problem and about 50% of health care workers will be physically assaulted during their career (3).

When initially encountering an agitated patient, the first step is to try and de-escalate the situation. This can be done by approaching the patient with a calm, non-judgmental attitude and allowing the patient to express his/her feelings or concerns. The physician should reduce stimulation by placing the patient in a quiet space, avoiding excessive eye contact and aggressive postures (4). If de-escalation is not effective or inappropriate due to severity of the aggressive behavior, physical and chemical restraints may be necessary.

Restraints should be used as a way to ensure patient safety and allow the physician to perform a complete exam, assessing for any potential organic process contributing to the agitated state. Restraining any patient should always be a last resort and done with extreme caution. Restraints have been shown to cause pressure sores, paresthesias, rhabdomyolysis, asphyxiation and death (3). Limiting a patient's ability to move and then chemically sedating them has the potential to not only cause harm but also encroaches on the patient's dignity and individual freedom.

Once the patient is physically restrained, they should be given chemical sedation to facilitate removal of the physical restraints. Think of physical restraints as a bridge to sedation and to facilitate initial, emergent evaluation. There are many options for the sedation of the acutely agitated patient in the ED. Haldol (5 mg IM) +/- Ativan (2 mg IM) is historically the preferred option for the *undifferentiated* agitated ED patient though there is data beginning to emerge to support the use of both Geodon and Zyprexa for this indication. For now, the most robust data for these medications is for agitated patients with underlying psychiatric disorder (especially bipolar and schizophrenia) though they will likely become used more widely in the coming years given their improved side effect profile, decreased tranquilization and faster onset. Of note, Zyprexa should be avoided in those patients on other CNS depressants, including alcohol, as it can potentiate their effects. Finally, special care should be taken with the elderly and the smallest doses of medication possible should be used. Generally, Haldol is the preferred medication (1-2 mg IM or 0.5-1 mg IV to start) though one could also consider Seroquel (25-50 mg PO) if the patient is willing to take oral medications.

As the number of outpatient treatment resources and inpatient beds continues to dwindle, the number of psychiatric patients boarding in the ED is rapidly increasing. As ED physicians, we master the ability to manage the acutely psychotic patient, however, we have little training on how to manage long term behavioral disturbances in the psychiatric patient that boards in the ED for extended periods of time. Remember that while we can sedate initially to facilitate evaluation, and can always sedate for patient or staff safety, we cannot force cares on patients against their will even if they are on a psychiatric hold unless we believe there is a real risk of medical illness. Further, it is important to remember that these patients often have other chronic medical conditions, such as DM and HTN, that will need to be monitored and treated while they are boarding. Anticipate continued agitation and order PRN medications (Zyprexa IM, Risperidone ODT and Seroquel PO are good options). Remember to review all medications and comorbidities when choosing PRN medications for continued agitation. Finally, order home psychiatric medications to avoid withdrawal syndromes. Looking forward, there are a few steps recommended by ACEP to help alleviate boarding in the ED. These include consulting your psychiatrist early, utilizing a case manager to help locate inpatient beds and create quiet observation units away from the chaotic ED.

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