Help! There’s an ADULT in my PEDIATRIC hospital!

A primer on common adult medical issues
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Cincinnati Children’s Hospital Medical Center
Pediatric Hospital Medicine 2017

Disclosures

• Dr. O’Toole is a paid consultant for the I-PASS Patient Safety Institute.
• Dr. Royer holds Pfizer stock.
Objectives

• Describe common medical issues that may arise in adults admitted to pediatric facilities
• Discuss three common life-threatening medical diagnoses that may require transfer to an adult facility
• Identify resources that provide guidance for management of adult medical issues

Agenda

• Background
• Venous Thromboembolism
  – When and how to use prophylaxis
• Diabetes and Hypertension
  – How high is too high, and how to handle it
• Medical Emergencies
  – What do to when you suspect heart attack or stroke
• Substance Abuse
  – What to ask, and when to worry
• Medical Decision Making
  – Who’s in charge here
Background\textsuperscript{1,2}


Inpatient Prevention of Venous Thromboembolism
Stephanie Royer, MD
Objectives

• Demonstrate how to perform a risk assessment using a commonly used tool
• Discuss options for pharmacologic prophylaxis
• Discuss contraindications to pharmacologic prophylaxis

Risk assessment

• Who to consider it for? Everyone!¹
• Commonly used tools
  – **Caprini score
  – Padua score
  – 3 bucket model
• In both adult and pediatric populations, improved prophylaxis rates have been demonstrated with implementation of a risk assessment guideline²,³

### Effective Risk Stratification of Surgical and Nonsurgical Patients for Venous Thromboembolic Disease


<table>
<thead>
<tr>
<th>Each Risk Factor Represents 1 Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 41-60 years</td>
</tr>
<tr>
<td>Swollen legs (current)</td>
</tr>
<tr>
<td>Varicose veins</td>
</tr>
<tr>
<td>Obesity (BMI &gt;25)</td>
</tr>
<tr>
<td>Minor surgery planned</td>
</tr>
<tr>
<td>Sepsis (&lt;1 month)</td>
</tr>
<tr>
<td>History of inflammatory bowel disease</td>
</tr>
<tr>
<td>Medical patient currently at bed rest</td>
</tr>
<tr>
<td>Abnormal pulmonary function (COPD)</td>
</tr>
<tr>
<td>Serious Lung disease including pneumonia (&lt;1 month)</td>
</tr>
<tr>
<td>Oral contraceptives or hormone replacement therapy</td>
</tr>
<tr>
<td>Pregnancy or postpartum (&lt;1 month)</td>
</tr>
<tr>
<td>History of unexplained stillborn infant, recurrent spontaneous abortion (≥3), premature birth with toxemia or growth-restricted infant</td>
</tr>
<tr>
<td>Other risk factors</td>
</tr>
</tbody>
</table>

- **0 very low risk**: no prophylaxis needed
- **1-2 low risk**: mechanical prophylaxis
- **3-4 moderate risk**: pharmacologic prophylaxis
- **5+ high risk**: mechanical AND pharmacologic prophylaxis

### Case

A 24 year old woman with cystic fibrosis with severe obstruction is admitted for a CF exacerbation. Her home medications include inhaled hypertonic saline, albuterol, and dornase alfa, pancreatic enzyme replacement, insulin, and an combined oral contraceptive. She is currently on her menstrual cycle. She has never had a blood clot before, and is not aware of any family history of this. CXR on admission shows a LLL infiltrate. On admission, her vital signs are temp 39.0C, HR 110, RR 24, BP 117/69, 92% RA. She has diffuse crackles and wheezing throughout with decreased breath sounds over the left lower lung field, and appears to be in mild respiratory distress. Her BMI is 18. She received intravenous antibiotics in the ED through a peripheral IV.
Using the Caprini risk assessment tool, what score would you give this patient?

- A. 0
- B. 1-2
- C. 3-4
- D. 5+

https://api.cvent.com/polling/v1/api/polls/sp-s4un6f
Ok, so that puts the patient at moderate risk for VTE...

- We should use pharmacologic prophylaxis
- Are there any contraindications to pharmacologic prophylaxis?
  - Active bleeding?
  - Already on therapeutic anticoagulation?
  - History of heparin-induced thrombocytopenia?
  - Diagnosed bleeding disorder?
  - Thrombocytopenia (<50,000)?
Finally, what agent would you use for prophylaxis?

A. Unfractionated heparin
B. Low molecular weight heparin
C. Fondaparinux
D. Argatroban
E. Aspirin
F. Warfarin

https://api.cvent.com/polling/v1/api/polls/sp-h65xs6
3 days later…

- Our patient gets a PICC line placed to facilitate prolonged antibiotics due to limited access.

- How does that change the Caprini score?
  - 2 additional points for central venous access, bringing the total score to 6.
  - Consider adding mechanical prophylaxis.

**Take Home Points**

- Hospitalization is an important risk factor for venous thromboembolism.
- For every patient:
  - Pick a tool and assess risk
  - Assess contraindications to prophylaxis
  - Re-assess risk at regular intervals

- Unfractionated and low molecular weight heparins are the major agents used for prophylaxis.
- Hopefully more to come about specific risk factors for VTE in adults admitted to pediatric institutions.
Inpatient Management of Hypertension and Hyperglycemia
Benjamin Kinnear, MD

Disclaimer
Hypertension in Adults

- Well defined **outpatient** guidelines – JNC8

<table>
<thead>
<tr>
<th>JNC 8 Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Subgroup</strong></td>
</tr>
<tr>
<td>≥ 60 years</td>
</tr>
<tr>
<td>&lt; 60 years</td>
</tr>
<tr>
<td>≥ 18 years with CKD</td>
</tr>
<tr>
<td>≥ 18 years with diabetes</td>
</tr>
</tbody>
</table>

- **No inpatient** guidelines or consensus statements

- 50.5% - 72% of adult inpatients have elevated BPs

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**Take home point #1**

**There is no evidence that routine treatment of elevated BPs in the inpatient setting improves outcomes.**

Therefore, we tend to be more permissive with BPs in adult inpatients.
Terms to know

**Hypertensive urgency**
- Elevated BP (>180/110), usually asymptomatic, no organ damage
- Targeted assessment for end organ damage
- Reduce BP by 25-30% in 6-12 hours (too fast = bad)
- Can often be managed with PO meds

**Hypertensive Emergency**
- Elevated BP (>180/110) + organ damage
- Chest pain, neurologic changes, SOB, severe HA
- EKG changes, proteinuria, AKI, pulmonary edema
- Get help immediately as you will be needing IV meds!


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Approach

1. Confirm how the BP was taken
   - Cuff size/location (too small = elevated readings)
   - Always ask for manual reading on multiple limbs before treating

2. Chart review for patient’s baseline BP
   - Chronic HTN = higher risk of problems with quick drop in BP

3. Evaluate for causes
   - Inaccurate reading (see above)
   - Pain
   - Anxiety
   - Withdrawal
   - IV fluids
   - Medications

Treat these if possible before giving antihypertensives!
Take home point #2

Most elevated BPs in adult inpatients do not need antihypertensives. They improve with:
- Repeat measurement
- Time
- Pain control
- Diuresis
- Anxiolytics

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<thead>
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<th>Starting dose/route</th>
<th>Specific situations</th>
<th>Contraindications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisinopril</td>
<td>5-10mg PO daily</td>
<td>CHF, proteinuria</td>
<td>AKI, hyperkalemia</td>
</tr>
<tr>
<td>Amlodipine</td>
<td>5-10mg PO daily</td>
<td>None specific</td>
<td>Severe edema</td>
</tr>
<tr>
<td>Clonidine</td>
<td>0.1mg PO bid-tid</td>
<td>Opioid withdrawal</td>
<td>Bradycardia</td>
</tr>
<tr>
<td>Hydralazine</td>
<td>10-25mg PO tid-qid</td>
<td>CHF w/ACEi contra.</td>
<td>AKI, angioedema</td>
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<th>Specific situations</th>
<th>Contraindications</th>
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</thead>
<tbody>
<tr>
<td>Labetalol</td>
<td>20mg IV q30-60 m</td>
<td>MI, aortic dissection</td>
<td>Cocaine, ↓HR</td>
</tr>
<tr>
<td>Nicardipine</td>
<td>5mg/hr gtt</td>
<td>None specific</td>
<td>Severe AS</td>
</tr>
<tr>
<td>Enaliprat</td>
<td>0.625-1.25mg IV q6h</td>
<td>CHF, scleroderma re</td>
<td>AKI, angioedema</td>
</tr>
<tr>
<td>Hydralazine</td>
<td>10-20mg IV q2-4h</td>
<td>CHF w/ACEi contra.</td>
<td>Severe kidney dz</td>
</tr>
</tbody>
</table>
Diabetes mellitus – kids vs adults

Kids

• Most have DM type 1 (insulin dependent)

• Carb counting, correction factors

• Often managed by a pediatric endocrinologist
Adults

- Many have DM type 2 (+/- insulin dependence)
- May be on oral DM medications
- Often do not carb count or use correction factors
- Often managed by a PCP

Approach

- Generally, hold all oral DM medications during admission
  - Use insulin coverage if needed
- Target glucose is between 140-180 \(^1\) (some use 140-200) \(^2\)
- Have basal/bolus coverage, do not use sliding scale alone (if >1-2 days) \(^1\)

**Approach**

- **TDD (known* or calculated)**
  - 50% as daily long-acting insulin
  - 50% as tidAC short-acting insulin

*May initially reduce home TDD by 25-50% if on high doses of insulin and suspect high glycemic diet or poor insulin adherence at home.*
The scenario...

- You are caring for a 26 year old with history of Hodgkin disease s/p chemoradiation who was admitted for a dental extraction.
- The bedside nurse calls you because he started to complain of chest pain after walking the halls.
- When you go to speak with him, he says the pain is on the left side of his chest, and he is diaphoretic.
Did you just say chest pain?!?!?

- First things first: assess clinical stability
- If unstable, call a **CODE!!!**
- If stable, you probably have a little time to think (and keep reminding yourself to breathe!)
- While you’re thinking (or calling a code), ORDER AN EKG and CXR!!! (maybe aspirin too)
- Labs may be helpful as well

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**What’s your differential at this point?**

<table>
<thead>
<tr>
<th>Dangerous/Life Threatening</th>
<th>Less Dangerous/More Benign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myocardial Infarction/Acute Coronary Syndrome (ACS)</td>
<td>Other cardiac (pericarditis)</td>
</tr>
<tr>
<td>Pulmonary Embolism</td>
<td>Other pulmonary (pleurisy, pneumonia)</td>
</tr>
<tr>
<td>Pneumothorax</td>
<td>Other GI (GERD, esophageal spasm, biliary/pancreatic)</td>
</tr>
<tr>
<td>Aortic Dissection</td>
<td>Musculoskeletal (costochondritis, rib fx, muscle)</td>
</tr>
<tr>
<td>Esophageal Rupture</td>
<td>Zoster</td>
</tr>
<tr>
<td>Pericarditis w/effusion/tamponade</td>
<td>anxiety</td>
</tr>
</tbody>
</table>

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I wish that EKG tech would get here!!!
Maybe I should pull up an old EKG…
Important historical points

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Palliative/Provocative</td>
<td>exertion, reproducibility</td>
</tr>
<tr>
<td>Quality</td>
<td>sharp vs dull/crushing; pleuritic</td>
</tr>
<tr>
<td>Radiation</td>
<td>jaw or L arm vs other places in chest/back</td>
</tr>
<tr>
<td>Signs/Symptoms (associated)</td>
<td>diaphoresis, nausea, tachycardia, DIB/SOB/hypoxia, dizziness</td>
</tr>
<tr>
<td>Timing</td>
<td>sudden onset (and with what activities?)</td>
</tr>
</tbody>
</table>

• Other things to ponder…
  – Any family history of cardiac (MI), pulmonary/clotting disorders (PE), connective tissue diseases
  – What are they here for?

Is that EKG done yet?

Brief exam

• Watch vitals

• Heart: muffled, murmur, regular, fast; JVD?
• Pulmonary: equal, wet, tympanic
• Extremities: swelling, pulses
• Skin: perfusion; are there EKG leads on at this point?

Labs: BMP, CBC, BNP (brain-type natriuretic protein), troponins, coags, blood gas; can consider D dimer
Acute Coronary Syndrome (ACS)/MI

- Historical points: REMEMBER PQRST!
- Other: family hx, comorbid diseases, radiation to chest
- EKG IS THE KEY!!!
  - Looking for ST changes (elevation/depression), T wave changes, Q waves, LBBB
  - Always helpful to have prior EKG

Classic signs and symptoms for having a heart attack are actually very poor indicators of MI.

ECG is the key!

- Difficult to interpret, easy to miss key findings…ask for help!

EKG MAY BE NORMAL HOWEVER!!!
ACS Steps

- Monitors
- Code cart – arrhythmias
- ASPIRIN (don’t overthink it)
- MORPHINE
- OXYGEN (if hypoxic)
- Nitroglycerin (if you have it)

- General point: if STEMI, need to get to cath lab in 90 minutes!
- Make sure you can show someone the EKG: adult cardiologist, internist/Med-Peds, pediatric cardiologist

Pulmonary Embolism

- All pretty equivalent (*Geneva purely objective*)
- Just pick one and use it
- In general, D-dimer only useful in low risk patients
- Should get EKG, but the S1Q3T3 pattern is rarely present.

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**Table 1. Clinical Decision Rules**

<table>
<thead>
<tr>
<th>Clinical Decision Rule</th>
<th>Original Version</th>
<th>Simplified Version</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wells rule</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous PE or DVT</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Heart rate &gt;100 beats/min</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Surgery or immobilization within 4 wk</td>
<td>1.5</td>
<td>1</td>
</tr>
<tr>
<td>Hemoptysis</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Active cancer</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Clinical signs of DVT</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Alternative diagnosis less likely than PE</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Clinical probability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE unlikely</td>
<td>≤4</td>
<td>≤1</td>
</tr>
<tr>
<td>PE likely</td>
<td>&gt;4</td>
<td>&gt;1</td>
</tr>
<tr>
<td><strong>Revised Geneva score</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous DVT or PE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-94 beats/min</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>≥95 beats/min</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Surgery or fracture within 1 mo</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Hemoptysis</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Active cancer</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Unilateral lower limb pain</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Pain on lower limb deep venous palpation and unilateral edema</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Age &gt;65 y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical probability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE unlikely</td>
<td>≤5</td>
<td>≤2</td>
</tr>
<tr>
<td>PE likely</td>
<td>&gt;5</td>
<td>&gt;2</td>
</tr>
</tbody>
</table>

DVT = deep venous thrombosis; PE = pulmonary embolism.

Pulmonary Embolism

- Workup (if PE likely):
  - CXR usually not helpful
  - Pulmonary embolism CT, or CT pulmonary angiography is diagnostic study of choice
  - V/Q scan can be used in certain situations (AKI/renal insufficiency, dye allergy, etc)

- Management: anticoagulation
  - Unfractionated heparin, low-molecular weight heparin, novel oral anticoagulants (NOACs)
  - Thrombolysis vs IR thrombectomy for clinical instability

Who you gonna call?

- Now you just need to know who to talk to...do you know who you can contact at your institution?
- Do you have a way to get them the information you need?
- Do you have a way to move the patient?
Chest Pain Key Points

- Clinical stability: SBP <90 or >40mmHg change from baseline, significant hypoxia, respiratory failure
- Get the EKG and CXR right away
- A focused PQRST history can go a long way
- ACS/MI: for STEMI, door to cath time should be <90 minutes; don’t delay aspirin administration

Not again…

- You are called to a rapid response on a 32 year old Fontan patient for confusion and difficulty arousing the patient.
- When you arrive, the patient is confused, and only saying "no" whenever you ask questions
- He appears unable to move his right arm or leg.

• What now?
When to suspect stroke

ACTIVATE THE STROKE TEAM!

Vital signs (ABCs)

When was last normal?
- Key that intervention happens early; not much to do if >6 hours out.

Exam: perform NIH Stroke Scale

Order comprehensive labs (Fingerstick glucose!), ensure IV access.

Order CT (non-contrast HCT, also order CTA as well), and call down to radiology to let them know (triage, interpretation).
NIHSS (really?)

- There's an app for that!
- Purpose: grade severity, direct treatment (i.e. tPA)
- Chances are you will not be pushing tPA! (but need to help facilitate the decision)

Big picture

- If you have adults, it may happen; your role is to help facilitate
- Key is early recognition, act quickly for basic steps
- Need to plan:
  - who to ask
  - how to get information to the people who need to know
  - Where/how to deliver the best care
- Anticipate, anticipate, anticipate!
- Make sure infrastructure is in place to deal with issues
Provider education is KEY

Substance Abuse

Jennifer O’Toole, MD, MEd
Background

Substance Use Disorder (SUD)

- Impaired Control
- Social Impairment
- Risky Use
- Pharmacological Criteria

- In 2015 roughly 8% of individuals >12 years of age had a diagnosable SUD
  - 6% alcohol
  - 3% illicit drugs

The Common Offenders

- Alcohol
- Tobacco
- Cannabis
- Stimulants
  - Amphetamines, Methamphetamines, Cocaine
- Hallucinogens
  - LSD, Psilocybin Mushrooms, Peyote
- Opioids
  - Legal and Illegal
It’s Getting Worse . . . .

- Drug overdose deaths → Main driver opioids
  - >33K deaths in 2015
  - Opioid overdoses have quadrupled since 1999

Screening For Substance Abuse

- Social history
  - Ask about ETOH, drug and tobacco use at the time of admission
  - Asking about it is the first step!!

- More specific screening tests for special situations
  - ETOH – AUDIT-C, AUDIT, CAGE questions
  - Illicit drug use – DAST, SoDU, ASSIST
Acute Intoxication Or Overdose

- Consider if patient presents with the following
  - Altered mental status
  - Smelling of ETOH or history of ingestion
  - Respiratory depression
  - Pinpoint pupils
  - Evidence of injection (track marks) or skin popping
  - Psychomotor agitation
  - Tachycardia or hypertension
  - Chest pain (vasoconstriction)

**Urgent Management**
- Respiratory support
- Hemodynamic support
- Give antidote!
  - Narcan (start at 0.04mg)

**Next Steps**
- Immediate testing for other life threatening co-ingestants → ASA, acetaminophen
- Creatinine, CK, glucose, UA
- EKG
- Pregnancy testing
- Treat complications → Seizures, agitation, vasospasm, hypertension

Withdrawal

- **Alcohol Withdrawal**
  - Minor → 6-36 hours
    - Tremulous, anxiety, diaphoresis, HA, GI upset
  - Seizures → 6-48 hours
    - Single or brief flurry of GTC seizures
  - Alcoholic hallucinosis → 12-48 hours
    - Visual, auditory or tactile hallucinations
  - Delirium tremens → 48-96 hours
    - Delirium, agitation
    - Tachycardia, hypertension, fever

- **Benzodiazepines**
  - Treat psychomotor agitation, as well as prevents progression to severe symptoms
    - Typically diazepam, ativan or chlordiazepoxide

- **Symptom Triggered Therapy**
  - CIWA-Ar Scale

- Alternative agents should not be used, including:
  - Ethanol
  - Anticonvulsants
  - Alpha-2 agonists
Opioid Use Disorder

• Referral to drug treatment program
  – Abstinence-based therapy
  – Medication assisted treatment
    • Methadone
    • Buprenorphine +/- naloxone (subutex or suboxone)
  – Psychosocial support services

Opioid Use Disorder

• Finding a program
  – Local social workers
  – National helpline support
    • Substance Abuse and Mental Health Services Administration (SAMHSA) – 1-800-662-HELP
    – *Confidential and free of charge ☺
Special Considerations For Discharge

• Needle sharing
  – Discourage given risk for HIV, hepatitis
  – Encourage needle exchange programs
• Naloxone on discharge
  – Now recommended
  – Can purchase over-the-counter at many pharmacies
• Discharging with IV access (PICC lines, midlines)
  – Use caution!

Medical Decision Making with Adult Patients
Lori Herbst, MD
Objectives

- Understand privacy rights of adult patients
- Identify components for assessing capacity
- Recognize delirium as a cause of confusion and loss of capacity
- Discuss who becomes the decision maker if a patient does not have capacity

Case – The Protective Parent of an Adult Patient

- 21-year-old developmentally appropriate male is admitted to the hospital for a sickle cell pain crisis
- Parents meet you at the doorway for rounds and expect to round in the hallway
How should the team provide medical information?

A. Outside the room and allow his parents to give information to the patient.
B. Outside the room now, and return later to talk with the patient.
C. Inside the room with the patient and his parents.
D. Inside the room with the patient only.
E. Ask the patient how he prefers to receive medical information from rounds.

https://api.cvent.com/polling/v1/api/polls/sp-wxzkz0
Privacy for adults

• HIPPA guidelines
  – Protects all "individually identifiable health information" including information given orally
  – Patients may identify “personal representatives” to receive their information
  – Parents usually act as the “personal representative” for minors
• Ask the patient how he prefers to receive medical information from rounds
• Ask who he wants present when providing information

Case

• The patient wishes for the team to round in the room and for his parents to be present
• The patient’s hemoglobin is low
• Hematology recommends a simple blood transfusion
Case

- The patient wishes for the team to round in the room and for his parents to be present
- The patient’s hemoglobin is low
- Hematology recommends a simple blood transfusion
- **Patient declines (he just wants to continue taking the pain meds)**
- **Parents want him to have it if the doctors are recommending it**

Competency vs Capacity

- **Competency**
  - Legal designation determined by the court system
- **Capacity**
  - Relates to the ability to make a specific medical decision
  - Patient’s capacity to make a decision may change over time
  - Determined by any licensed physician
  - Psychiatry can often help if situation is unclear
What are the criteria to determine if the patient has the capacity to make this decision?

A. Express understanding and a choice
B. Demonstrate appreciation and evaluation
C. Physician agrees decision is reasonable
D. A and B
E. All of the above

https://api.cvent.com/polling/v1/api/polls/sp-mol55
Criteria for Medical Decision Making Capacity

• Understanding
  – Indications, benefits, risks, and alternatives
• Appreciation
  – How the information applies to the patient
• Evaluation
  – Weigh the risks and benefits
• Express a choice
  – Communicate preference

When is decision making capacity assessed?

<table>
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<tr>
<th>Decision</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept Intervention</td>
<td>Likely Beneficial Outcome and/or Low Risk</td>
</tr>
<tr>
<td>Refuse Intervention</td>
<td>Likely Poor Outcome and/or High Risk</td>
</tr>
<tr>
<td></td>
<td>Low standard for capacity assessment</td>
</tr>
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Leo R. Competency and the Capacity to Make Treatment Decisions: A Primer for Primary Care Physicians. Primary Care Companion To The Journal Of Clinical Psychiatry [serial online]. October 1999;1(5):131-141
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<td>Refuse Intervention</td>
<td>High standard for capacity assessment</td>
</tr>
<tr>
<td></td>
<td>Low standard for capacity assessment</td>
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</table>

Leo R. Competency and the Capacity to Make Treatment Decisions: A Primer for Primary Care Physicians. Primary Care Companion To The Journal Of Clinical Psychiatry [serial online]. October 1999;1(5):131-141

Case

- The patient can articulate the risks and benefits and why he does not want the transfusion for himself
- The doctor determines the patient does have capacity to make this decision
- He does NOT receive a transfusion
Case

• The patient can articulate the risks and benefits and why he does not want the transfusion for himself
• The doctor determines the patient does have capacity to make this decision
• He does NOT receive a transfusion
• Patient needs increasing doses of IV hydromorphone and becomes confused

Delirium – DSM V definition

• Disturbed attention or awareness
• Develops over short time period and fluctuates during day
• Cognitive disturbance (memory, language, visuospatial, perception)
• Due to another condition (meds, toxins, metabolic)
• Not explained by another neurocognitive disorder
Case

- The patient develops an oxygen requirement
- Concern for acute chest vs over-sedation from the narcotics
- Hematology recommends an exchange transfusion
- The patient is delirious and lacks capacity
- Parents disagree about patient’s wishes
  - Mom feels he would want the transfusion because his condition is changed
  - Dad feels he said no before so would say no now
- Patient has not completed an advance directive

Who makes the medical decision?

A. Either parent who is present at the bedside.
B. The person listed as his emergency contact.
C. Consensus decision of both parents.
D. The doctor if the parents disagree.
Who Makes Decisions When a Patient Cannot?

• Designated Power of Attorney for Health Care
  – Type of advance directive identifying an individual to make medical decisions
  – Only utilized if patient does not have capacity
  – Joint Commission standard to ask if a patient has an advance directive or wants information on advance directives upon admission to hospitals

• Next of Kin
  1. Spouse
  2. Parents
  3. Adult children

• Guardian
  – Legal process that would (usually) cover medical decisions
Case – In a Perfect World...

• Oxygen requirement and delirium resolve with weaning of narcotics
• The medical team uses this as an opportunity to discuss the importance of an advance directive

Conclusions

• Adult patients have a right to keep their medical information confidential (even from their parents)
• A patient has capacity if they can express understanding, appreciation, evaluation and a choice
• Delirium should be considered if a patient has an acute change in mental status
• If a patient does not have capacity, next of kin or a DPOA would make medical decisions
Thank You!

Questions?